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Torah Shield with Pointer, 1975
Mary Ann Scherr (New York)
Sterling silver, brass, steel, and quartz crystal
Construction: applique, engraving, stone setting, and cold joining
Height: 24 inches; width: 12 inches
Length of chain: 30 inches

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REVIEWS

IRENA BRYNNER: JEWELRY SINCE 1953

by Lloyd E. Herman
Director, Renwick Gallery

Irena Brynner, Earrings, 1957, 18k gold

Irena Brynner, who worked actively as a goldsmith in San Francisco and New York in the 1950's and 1960's, moved to Geneva, Switzerland, in 1972. A retrospective exhibition covering the past thirty years of her active career at the Musee de l'horlogorie et de l'Emaillerie there attests both to her whereabouts geographically and stylistically in her profession. The Renwick Gallery will present the exhibition from September 28, 1979, through January 13, 1980.

As Brynner recalled in her 1968 book, Jewelry as an Art Form (reprinted this year by Van Nostrand Reinhold), "In 1949 I did not know a thing about jewelry. I had received my art education – both academic and practical – at the art school and university in Lausanne, Switzerland, and later took private lessons in painting and sculpture." When she came to the bay area in 1946 after spending the war years in China (she was born in Russia) she was

devoted to pursuit of a career as a sculptor. She saw the creative possibilities of jewelry as mobile sculpture in a necklace by Claire Falkenstein, and decided to apprentice to a jeweler.

In the fall of 1949 she served a two-month apprenticeship before taking a job with Franz Bergman, producing his jewelry designs. "I will always be thankful for that experience," she said. "I was responsible for the work from start to finish. The process was shown to me step by step on the first piece, then I was left to do the rest."

"In January 1950 I went to adult education classes. I learned how to work out my ideas and where to get all the necessary equipment to start working at home. The first year or year and a half my equipment was very primitive – a washing machine motor served as a polisher; a Bunsen burner and small alcohol torch were my sources of heat. I had files and pliers and did my soldering on a metal ironing board. It was simple, but I think it is very good to get along with the minimum."

Her first pieces – and some of the most interesting in the exhibition – are simply constructed pieces made of wire and silver sheet. Much of her early work was geometric in form, and three dimensional. Brynner acknowledges the influence of the Bauhaus on her jewelry through the work of Margaret DePatta, an associate in the Metal Arts Guild.

It was after the Guild sponsored a seminar on forging in 1952 or 1953 that Brynner began to work in gold, beginning a series of forged necklaces, and a later series of necklaces with forged sections which were riveted together. Brynner's first show, in New York, in 1956 at Walker and Ebeling, a jewelry store on Forty-Eighth Street, included her first pieces using precious stones. Some of the pieces in that show were cast, but most were forged or constructed.

Exposure to the organic architecture of Antonio Gaudi in an exhibition at the Museum of Modern Art in the first year Brynner lived in New York, 1957, influenced her later jewelry. Working more with was she explored new techniques. "I began making lacy forms by piercing sheet wax with a hot tool and then blowing out the excess was or, to achieve a different type of openwork, I dripped wax on a previously constructed mesh of wax wires. Either of these techniques in already cast metal can be reworked with a dental burr – enlarging the holes and making the walls thinner, resulting in still another effect."

Her solo show at the Museum of Contemporary Crafts in 1959 included approximately sixty-four pieces in a variety of styles from the preceding five years. "There were tailored forged pieces and very baroque, lacy cast pieces," Brynner recalls. Since then her work has relied primarily on cast elements, and a modern water welding technique which employs distilled water and electrolyte liquid for spot joining of metals at high temperatures.

Although Brynner's retrospective exhibition in Geneva also includes sculpture, none will be shown at the Renwick Gallery when the exhibition opens in Washington in the fall, or in subsequent showings in the United States and Japan. The sculpture, like her jewelry, usually relies on robust, seemingly-organic surfaces and forms, at once coarse and delicate. Brynner's persistence of style is almost a contradiction of directions seen in American handcrafted jewelry in recent years. She surrounds cut and natural stones with irregular cast metal elements. She combines elongated Mississippi pearls with attenuated forged 'leaves' to create a necklace of classic elegance. She gives us lumps of molten gold which might have been formed in the earth in a nuclear blast at a time when other American goldsmiths have found influences in Art Deco, Buck Rogers, primitive cultures, comic strips, King Tut, and the 'organic' aspects of Art Nouveau tendrils. Is her jewelry an anacronism of style in the United States today? Or does Brynner's continuing exploration of form which brought her work recognition, with the techniques comfortable to her, inspire special regard because she has failed to follow recent stylistic trends? It seems not to matter if her artistry can be enjoyed on its own terms.

Irena Brynner, Necklace, 1978, 18k gold, sterling, pearls

ARTISTRY IN METAL

by Thomas Jenkins

One of the 75 exhibits in the statewide multi-media celebration of "Colorado Women in the Arts" during May was a rare display of jewelry and metalwork at the Silverworks shop in Boulder. Five women artists, ranked among the best goldsmiths in the nation, exhibited work of exquisite craftsmanship. These women – Connie Crauer, Nilda Getty, Nancy McGahey, Olga Plam and Robbie Smith – each possess a different style but all revealed meticulous control of material and technique.

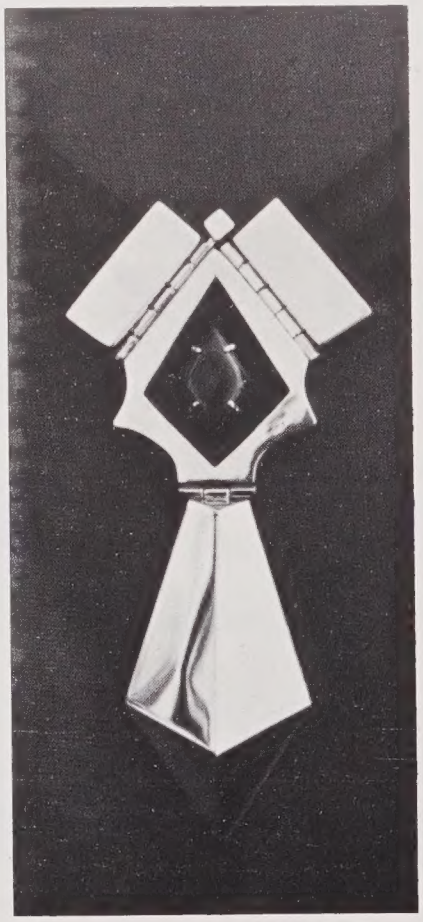
In most art media, technical control of the material is inseparable from the conceptual design which inspired it – in metal work, perhaps more than any other medium, art and science coalesce. With mastery of specialized techniques involving the use of precision instruments and equipment, raw, formless elements from the earth are transformed into finished art. Unlike some commercial ventures, these five artists have not simply repeated proven historical methods to make previously established objects but have experimented with new forms and combinations of techniques. Each piece of work is new; each finished product is one of a kind.

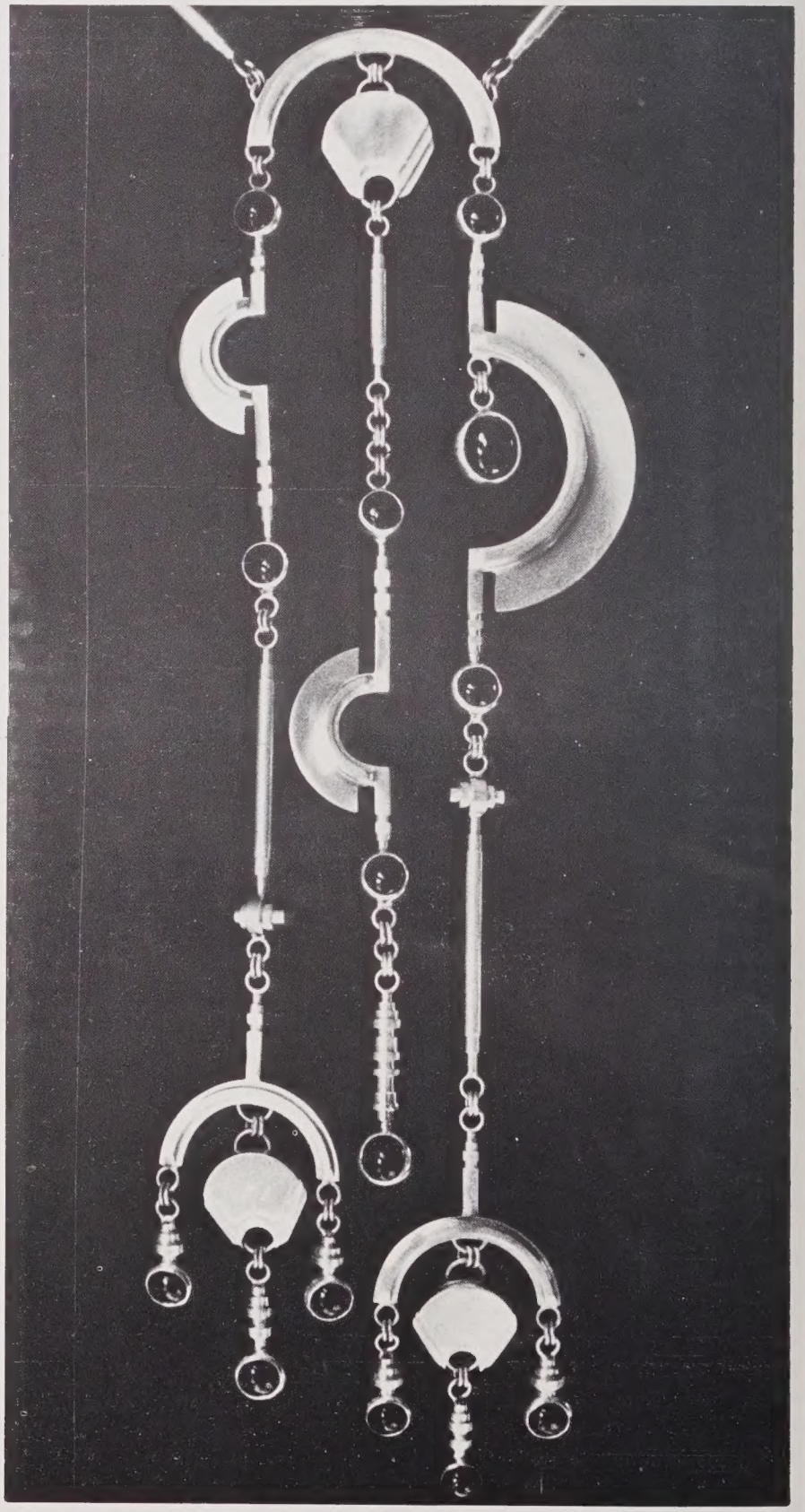
Connie Brauer's absolute control of her craftsmanship in enameling and precious stones, including opalescent enamels and sterling cloisonne, is meticulous artistry at its best. Nilda Getty's strong, cerebral forms reflect her conceptual emphasis, with some pieces elaborate, ornate and complicated. Nancy McGahey, working with highly polished metal (brass mostly) and in some instances plexiglass, wood and amethyst in accompaniment, has developed stylistic forms of undulating lines with curls and curves. Olga Plam's classic filigree technique, rare in this country, shows her Russian background as she creates baroque-like effects with gold, pearls, jade and coral. Robbie Smith, fascinated with mechanical forms, uses a large metal lathe to produce crisp and controlled neckpieces of silver and precious stones.

The Silverworks exhibit was deliberately limited to only five artists to enhance the atmosphere and conditions of display. Artistic technicians of accomplished wizardry, these women have changed earth-elements to art.

Robbie Smith, neckpiece, silver, stones

Nancy McGahey, neckpiece, sterling, malachite, cording





JOHN ROTTER
INTRODUCTIONS '79
June 28 - August 18, 1979
WALNUT CREEK
CIVIC ARTS GALLERY

by Roberto Bedoya

John Rotter, "Waiting for Amos" bolo tie, brass, copper, zinc, lead, steel, wood, 6" x 5" x 1½"

A hint of the 'we' that exists in the metalwork of John Rotter can be found in this quote of his, "the qualities of preciousness have nothing to do with material; the preciousness itself is how it affects the people." The effect of Rotter's work, which is part of the current exhibit "Introduction '79" at the Walnut Creek Civic Arts Gallery, is a delight. A delight that is the result of his wit and acknowledgement of the everyday.

When you view a piece like "Banquet Years" – a brass, copper and nickel napkin holder shaped as a hot dog, you can't help smiling. That same delight is found in other pieces like "Frankie and Johnny," his homage to Chicago gangsters or "The man I want is the gambling man that wears a long gold chain," a container designed to hold a deck of cards. Rotter has the ability to take the function of an object whether it be a napkin holder, a container or a pin and combine that with his whimsical sense of aesthetics to create something that is both useful and beautiful.

He teases the boundries of functionalism with his bolo tie series. Because of their size and weight, these ties could be worn by Paul Bunyan but not us mortals. They function more as a trophy than a tie.

Rotter pays tribute to the everyday that is part of America by making hot dogs, playing cards and cowboys a part of his work. He continues this acknowledgement of what is common to us by using familiar metals such as brass, copper, aluminum or rubber.

In the series of metalwork called "Bright Moments; the Secret Garden of Gabriel Romano," he moves further away from the functional aspects of jewelry. What he has done is created landscapes. In some pieces, pins that are one-dimensional caricatures of people stand as stage props on a base where there exists the cutout image of the pin's shape. In other pieces of the series, little dramas are being carried out with dogs, fences and people. These landscapes are truly "Bright Moments."

Rotter creates the "we" that is important to his craft by making us smile and thus establishing an exchange between his work and ourselves.

John Rotter, "Banquet Years" napkin container, brass, copper, nickel, 6" x 5" x 3"

8th ANNUAL INVITATIONAL CRAFTS SHOW BANK OF VIRGINIA JULY 9 - AUGUST 3, 1979

By Sue Barton Harris and Myron W. Curtis

STERLING DESIGNS DAZZLED AND TOP WINNERS WERE ANNOUNCED

The Annual Invitational Crafts Exhibit, sponsored by the Bank of Virginia, has in past years been dominated by fiber and ceramics with a minimal number of pieces in glass, wood and metal. With steady growth each year in both quality and size, this year's exhibit included 7 metalsmiths showing 17 excellent pieces which filled three showcases to overflowing. The exhibit was composed of 126 pieces by 46 craftsmen from 7 states with two of the 17 awards going to metals: C. James Meyer, "Herringbone Pattern Ring" and Jean Tudor, "The Creation: XI The Volcano: Active and Dormant."

The exhibit was by invitation only with invitations going to previous winners, each of whom was asked to invite one designer-craftsman who would contribute to the quality and diversity of the exhibit.

This year's juror was Dr. Herbert J. Burgart, President, Moore College of Art, Philadelphia, Pa. Dr. Burgart, after a rather lengthy selection process, commented: "The overall, high level of quality made it difficult to choose." His 17 selections were for prize money totaling $1475.00. He commended the Bank of Virginia's support of the Arts by its continued sponsorship of the Annual Invitational Crafts Exhibit.

The show was handsomely installed by sculptor Rita Marlier. The entire bank lobby became a gallery with all but vital furniture removed and the exhibit built around the bank tellers, bank officials' desks and the customer service area.

The exhibiting metalsmiths were:

Mark Baldridge, Midlothian, Va., assistant professor at Longwood College. Mark exhibited a silver neckpiece, a set of silver goblets and "Silver Warriors," a handsome chess set of silver pieces on a board of rosewood and sumac, a good example of Mark's top quality casting and carving abilities.

Betty Helen Longhi, Seaford, Del., who is well known for her forged work, exhibited 3 silver neckpieces. Betty's keen sense of humor and technical ability are aptly displayed by her "Two Cheers For The Red, White and Blue," waving American flags of brass, silver and enamel.

Komelia H. Okim, Rockville, Md., metals instructor for Montgomery College, exhibited silver neckpieces and "Merry-Go-Round," a sterling silver globe shaped wine bottle with an amethyst crystal set in the lid. In past summers Komelia has taught in Germany and had a one-woman show in Korea.

Dianne Porzel, Norfolk, Va., metals instructor at Old Dominion University, showed her skill in chasing and repousse with "Clouds," a belt buckle of copper, silver and brass. Her "Dragon's Hammer" of silver, walnut and deerhorn reveals her fascination with creature forms in the two small dragons entwining the walnut handle and horn head.

Jean Tudor, Grosse Point Park, Mi., formerly of Hampton, Va., has a well established reputation in Va. as a talented enamelist whole work grows and improves in each exhibit. New forms and presentation concepts seem never ending with Jean. Her prize winning "The Creation: XI The Volcano: Active and Dormant" is a good example. The reversible cloisonne enamel with a stoned matt finish portrays an active volcano on one side and a dormant one on the reverse.

Ronald Wyancko, Port Republic, Va., metals instructor at James Madison University, exhibited sculptural forms including silver "Container Forms" with a delicate well executed gray silk weaving in the small hinged lid. Ronald's "Watering Can" of silver plated brass displayed his technical abilities in forming spiculum tentacles.

C. James Meyer, Midlothian, Va., metals instructor at Virginia Commonwealth University. Jim's strong sense of design and craftsmanship is evident in his prize winning "Herringbone Pattern Ring" with hues of gold forming a central herringbone pattern.

C. James Meyer, "Herringbone Pattern Ring" gold

Wit, imagination, talent and a lavish display of precious metal provided viewers in New York with a visual treat this summer when "Statements in Sterling/79" spotlighted 78 handcrafted, one-of-a-kind pieces from the 1979 Sterling Silver Design Competition, sponsored by the Sterling Silversmiths Guild of America.

Judges for the 1979 competition were Arline M. Fisch, professor of art, San Diego State University; Lloyd E. Herman, director, Renwick Gallery of the National Collection of Fine Arts, Smithsonian Institution; and Burr Sebring, director of design, The Gorham Company.

During the 21 years since its inception, the Sterling Silver Design Competition has attracted an increasing number of entrants. This year, there were 199 entrants representing 69 design schools. Seventy-eight were selected for exhibition at New York City's Lever House, 11 of whom received cash top winner awards, totaling $2000. The metal-working departments of schools attended by the prize winners also received matching awards from the Niemeyer Memorial Educational Fund.

Top award winners were:

1st Steven James Brunst, Southern Illinois University, three piece container with salt and pepper shakers.

2nd Alfred Ginsberg, Craft Students League, New York City, ice bucket.

3rd Judith Smith Miller, University of Iowa, double walled open container.

4th Peggy Simmons, Florida State University, coin bank.

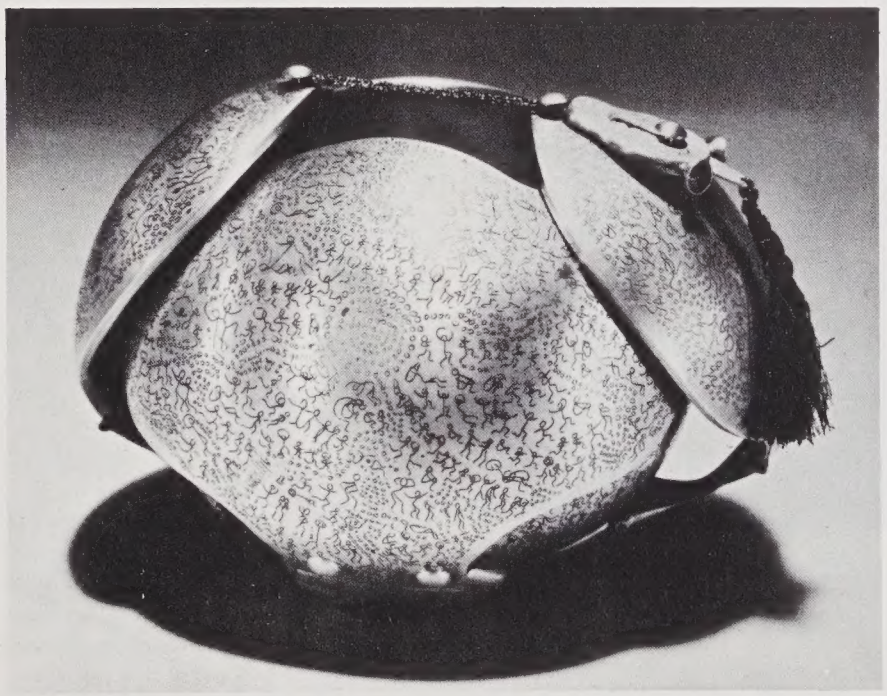
5th Karen Pekelney, University of Iowa, fabricated container.

COLETTE'S SHOW AT HORIZON GALLERY, MILL VALLEY, CALIFORNIA, JULY, 1979

by Laura Popenoe

Alfred Ginsberg, Ice Bucket, sterling

Karen Pekelney, Etched Fabricated Container, sterling



Honorable Mentions were awarded to: Marjorie Backup, Washington University; Kathy Buszkiewicz, Indiana University; Kenneth Doza, Washington University; Mary Upin, San Diego State University; and Nancy Worden, University of Georgia. A special flatware prize went to Jeff Dorr, Ohio State University.

The exhibition of cloisonne enamels by Colette, currently on view at the Horizon Gallery in Mill Valley, is intense. Her work literally moves, as does the universe in process, with processions of streaming animals.

Over a period of eight years she has so mastered the difficult art of cloisonne enameling, that she is able to express her personal iconography with excellence of technique. Colette's colors are clear, clean, limpid and luscious... cool mauves and blues are interplayed with hot accents of reds, oranges and yellows. Her exquisite use of opalescent colors, as in the shimmering pink pigs, is matched by few enamelists.

In addition to the jewelry, for which she is widely known, this show has three sculptures, electro-formed and displayed on pedestals. They show horizontal processions of pigs, cats and elephants – a camel here, a rider there – moving under shifting and lavish skies. Colette's heavens are gorgeous, flecked with gold-dust, through which a heroic white bird flies into eternity. The processions move in and through vertical forms which have metamorphosed from fingers, to edifices, to crumbling rocks. Through the apertures we see views to other realms. Her use of eyes, hieroglyphs (her Own), tears, sperm and blood are her mystery language expressing other aspects of change and disintergration.

The jewelry relates in image to the sculptures – gold rings and pendants, shaped like little hands, with a jewel on top or bottom; a strong masterful bracelet with winged shapes, bezeled in gold and mounted on sterling silver. There is a five-part necklace, with a running scene and hidden word, also to be found in a tryptych bracelet with related theme.

What a relief these jewels are from the tired hearts, flowers, and kitsch usually featured in enameled jewelry. Colette uses 24K fine gold for the wires and bezels and all works, including sculptures, are enameled on a base of fine silver. Above all it is the gloriousness of the colors, which have strength and clarity, that makes these pieces truly works of art.

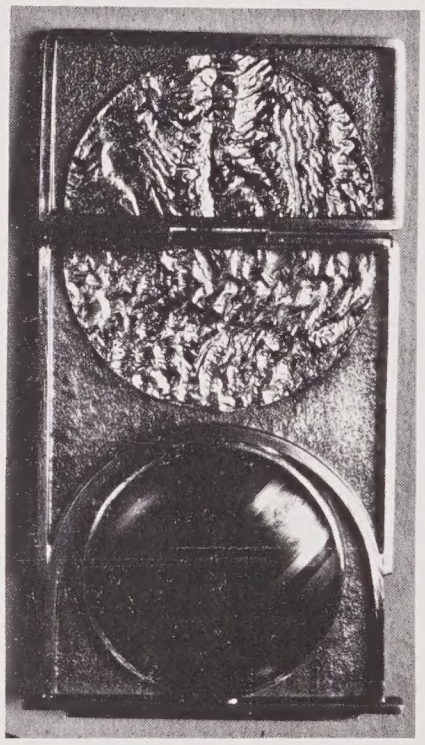
Her most recent awards include "Prix d'honneur du Jury" at the Fourth Bienniale International of the Art of Enameling in Limoge, France, 1978; the Marietta College Purchase Award; and co-winner of the Following Sea Award (1978). This year the Pacific States ACC Fair has purchased a work to be donated to the Oakland Museum.

As a human being and an artist of depth and integrity, Colette, like her processions, is on the move.

CRAFT PROFESSIONALS OF VERMONT

Craft Professionals of Vermont opened their 1979 traveling exhibition of 96 works on June 2, 1979, at the Brattleboro Museum and Art Center. The juror was John Heller, jeweler and potter, and president of the Massachusetts Association for the Crafts.

Metalsmith Al Gilmore was selected to be a participant in the May 1980 group exhibit at the T. M. Wood Art Gallery, Montpelier, Vermont. Honorable mentions in metal went to Tim Grannis and Judi and Fred Danforth.



Al Gilmore, brooch, sterling, Hematite, 2¼" H
photo: Mats Nordstrom

Tim Grannis, bracelet, sterling, 3" square
photo: Mats Nordstrom

BOOK REVIEW

HOLLOWARE TECHNIQUES: BASIC METHODS FOR MAKING THREE-DIMENSIONAL OBJECTS IN METAL, Douglas Steakley, Watson-Guptill Publications, New York, 1979, $15 hardcover

Reviewed by Marjorie Schick

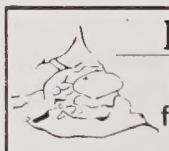
Douglas Steakley's excellent new book on holloware techniques serves both beginning as well as advanced metalsmiths. In the book Steakley clearly demonstrates how to make three pieces: a stretched bowl and a seamed base, an asymmetrical crimped and angle-raised bottle form, and a seamed and constructed coffee pot. The book reads easily and the top half of each page is devoted to a clear, well-chosen photograph of the artist executing the pieces in step-by-step order with drawn diagrams inserted where necessary. Steakley's clear style of writing and the logical manner in which the book evolves from descriptions of the metalsmith's studio and basic tools to basic techniques, and on to the completion of a complicated seamed coffee pot, should enable anyone reading it to perform the processes he demonstrates even without prior experience. At the same time, those who have done a great deal of silversmithing will be able to pick up pointers and will enjoy the photos of metalsmithed objects that are included.

Another plus for Steakley's book is the high quality of the illustrated objects, not only the three of his own design used to demonstrate metalsmithing processes but also those by Henning Koppel, Karl Gustav Hansen, Hans Christensen, Kurt Matzdorf, Helen Shirk, Fred Fenster, Paul Mergen, and John Marshall, plus additional pieces by Steakley. There are no color photos in the book, but the black and white photographs are well taken and seem appropriate to the look of the book. The volume is a pleasure both aesthetically as well as educationally.

The book will be a must for metalsmiths because Steakley does not stick to the explanation of just one way to achieve a hollow form but illustrates four methods of forming, including the chapter on crimping and angle raising. In addition, in the chapter on "Basic Techniques," Steakley demonstrates how to forge a knife. The easy-to-understand text and the breadth of the processes covered will make the reader anxious to pick up the hammer, sit down at the anvil or stake, and move that metal!

Because the book emphasizes technique, it might have been helpful to have had a brief description of the process or processes used on each of the pieces illustrated in the book. Steakley does this for most of the objects, but there are several which leave one wondering how they were done or which techniques were used to fashion them.

At $15, this hardcover book is an excellent investment. The aesthetic qualities of both the book and the pieces illustrated, plus the information gained from the text, make it a good value. The book's tasteful, straight-forward, logical layout recommends it as the start for the library of a beginning metalsmith or as a useful addition to the collection of an experienced professional.



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SATSUO ANDO WORKSHOP

by Al Ching and Heikki Seppa

Editor's Note: Satsuo Ando, a prominent Japanese swordguard and mountings maker, visited California State University, Fullerton, to conduct a two-week workshop subsidized by a $9,000 National Endowment for the Arts grant. The grant also subsidized the 10 invited workshop participants. Ching, who teaches silversmithing at CSUF, studied in Japan with Ando under a 1970 grant and wanted him to return and share his knowledge of these relatively unknown techniques.

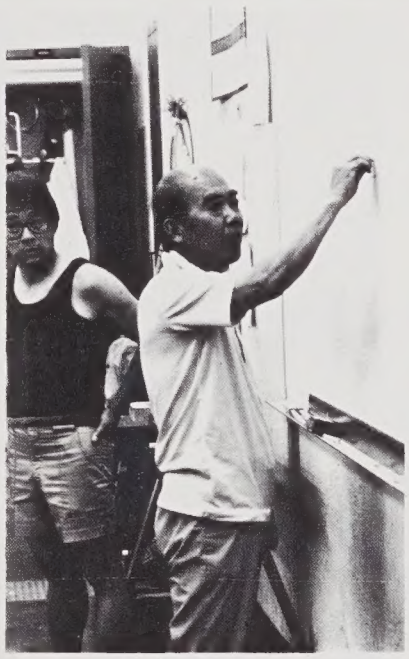

FIG. 1

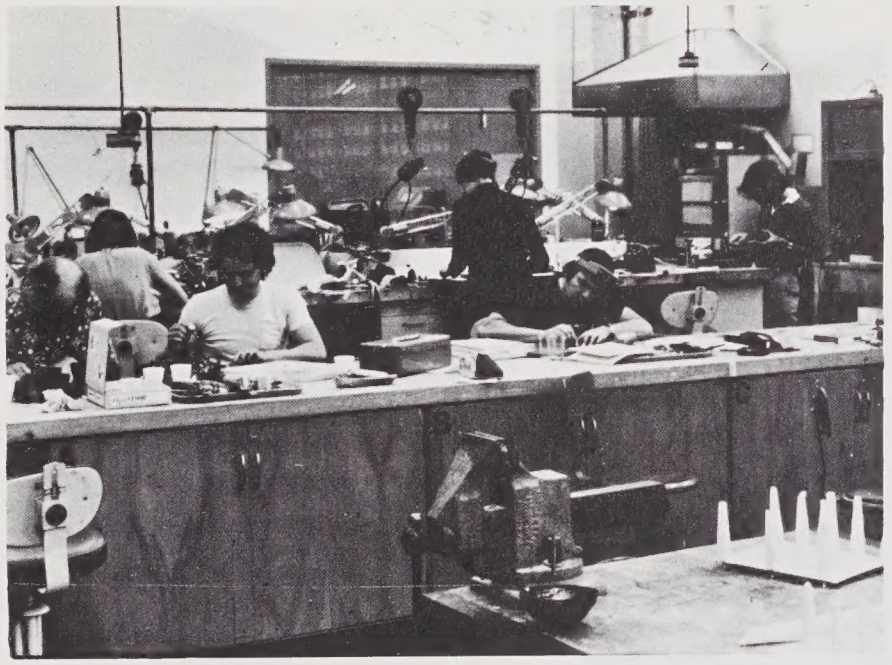

FIG. 2 *photo Ornament Magazine*

FIG. 1

Mr. Satsuo Ando, from a town outside of Tokyo, giving a chalk talk to a group of professors. They were more accustomed to being at a blackboard with chalk in hand than sitting at a workbench with a pencil and notebook. Al Ching, professor of metalworking at California State University, Fullerton, looking on, had had an opportunity to study with Mr. Ando, in Japan, a few years ago. Through the kindness and generosity of Mr. Ando, a National Endowment for the Arts matching grant and the California State University, Fullerton art department, Al Ching was able to host this unique gathering of dedicated metalworkers. The primary focus of the two-week workshop was on processes with a concomitant emphasis on toolmaking. The specialized tools had to be made by the individuals. Finished tools cannot be purchased, not even in Japan.

FIG. 2

The California State University, Fullerton jewelry/metalworking studio, site of the 1979 Ando/CSUF Japanese Metal Techniques Workshop. Some of the 10 participants from left to right: Bob Ebendorf, State University of New York, New Paltz; Eleanor Moty, University of Wisconsin, Madison; Jamie Bennett, Memphis Academy of Art; Mary Lee Hu, Michigan State University; Val Link, University of Houston; Richard Mafong, Georgia State University. The other participants, not pictured: Heikki Seppa, Washington University, Missouri; Arline Fisch, San Diego State University, California; David LaPlantz, Humboldt State University, California; Richard Mawdsley, Southern Illinois University, Carbondale. In the foreground, some of the 40 step-by-step tool models made by Al Ching for the workshop.

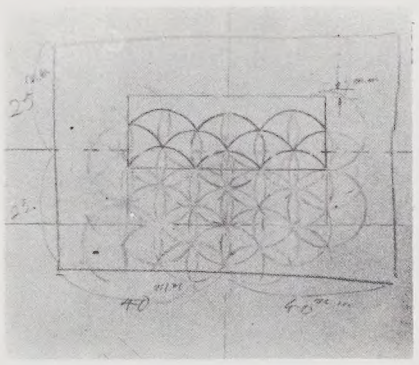

FIG. 3 *photo by Al Ching*

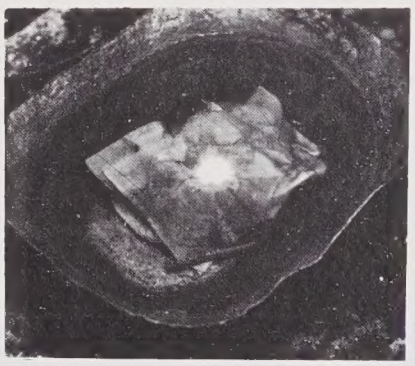

FIG. 4 *photo by Al Ching*

FIG. 3

The workshop participants did two projects designed by Mr. Ando. The first one, depicted here on the classroom's chalkboard, was executed on 14-gauge copper sheet. It introduced the participants to and provided them an opportunity to use their newly made tools for engraving, carving, finishing, flush and raised inlay and scraping.

FIG. 4

Like a creature from outer space, Arline Fisch's just poured shakudo glows in a container of hot water. The ingot is suspended in the water by a cotton-lined cradle. Molten metal solidifying in hot water produces a smoother and denser ingot. The resultant alloy yields a better color when patinaed with the copper compound solution of rokusho.

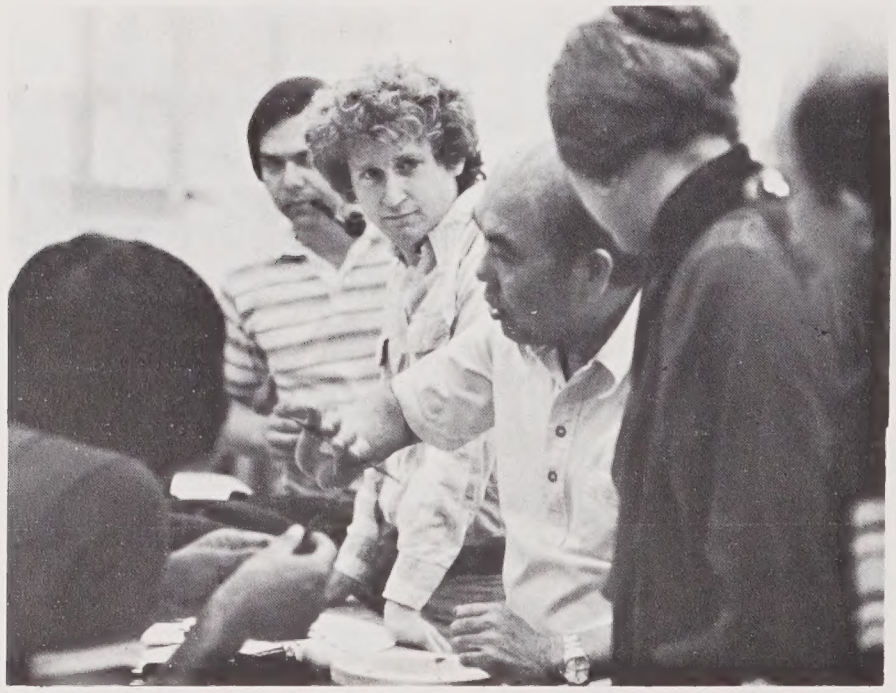

FIG. 5 *photo by Al Ching*

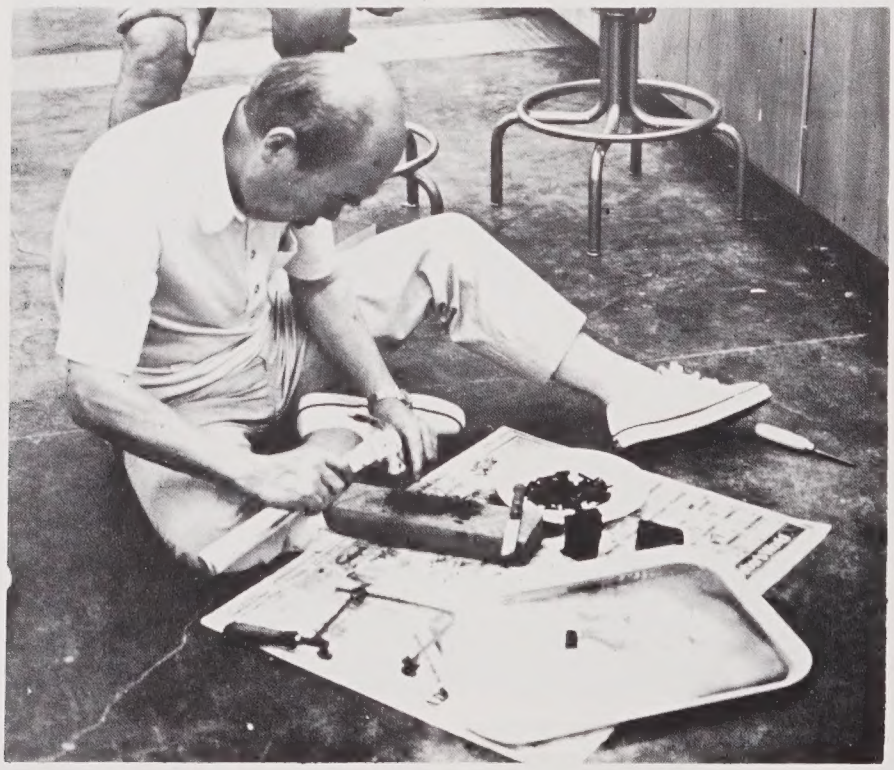

FIG. 6 *photo by Ruth Laug*

FIG. 7 *photo by Ornament Magazine*

FIG. 5

Satsuo Ando has the undivided attention of the only "real" student of the workshop. Jim Brown, graduate student, participated in the activities when not assisting in the workshop's proceedings. Left, Richard Mafong, Val Link with pipe, Jim Brown, Mr. Ando, Mary Lee Hu, David LaPlantz.

FIG. 6

Mr. Ando, working on the floor, as he does in his home studio. He is splitting charcoal branches into workable size for his students. In his work, Mr. Ando uses charcoal made from two different trees for finishing and buffing.

FIG. 7

"Seikainami" (oceanwaves) 14 gauge copper plate by Eleanor Moty in a cafeteria tray of water. The plate is in its last stages of preparation for patination. The high contrast is not from oxidation but is caused by the residue from the charcoal stick used for polishing. Scotch stoning preceded this step. Final buffing is with charcoal dust and a special hand brush.

FIG. 8 *photo by Al Ching*

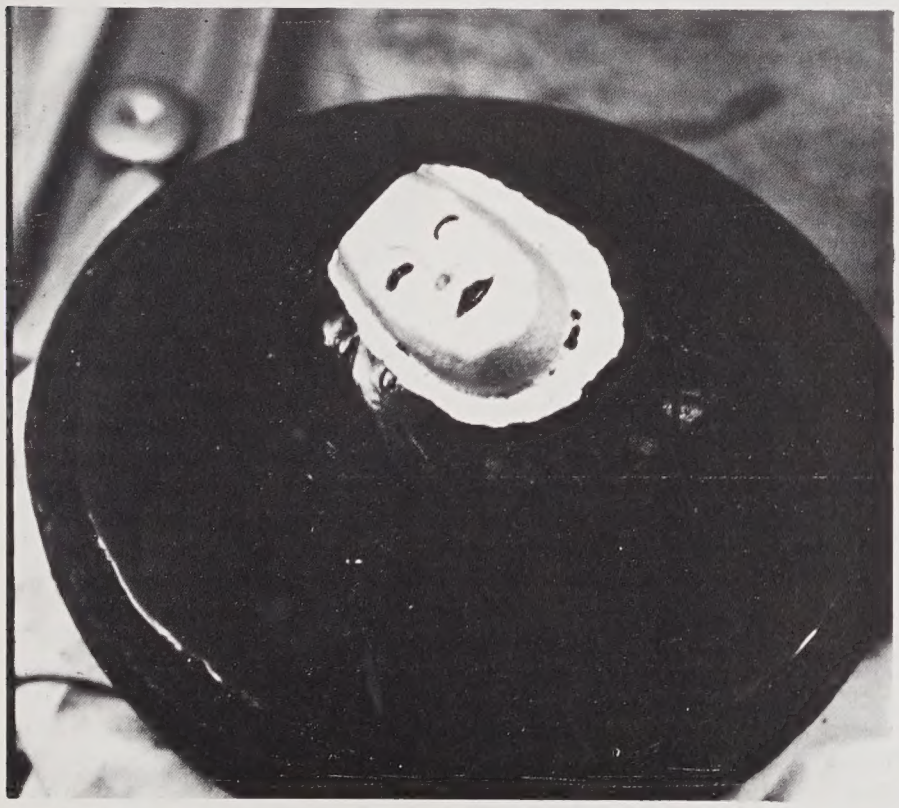

FIG. 9 *photo by Ornament Magazine*

FIG. 8

Ray Hein, jewelry professor at California State University, Fullerton helping prepare lunch on a wok, reiterating the international flavor of the workshop. His support and assistance were contributing factors to the success of the two weeks. The short lunch periods were also used by the participants to show slides and/or examples of their past and current directions.

FIG. 9

The second and last project was a repoussed mask in 20 gauge copper or, as in the case of Mary Lee Hu's mask shown here, in fine silver. The pitch originated in Great Britain, was mixed in Hong Kong and purchased and shipped from Japan. A telling anecdote to underscore the group's involvement and dedication. The manager of the apartment complex that housed the workshop participants called them her "ghost group." She expected not to see them during the day but was a little mystified at not seeing them in the early morning and evening too. This was due, naturally, to their long hours in the classroom, including Saturday and Sunday.

It was an intensive, educational and gratifying two weeks. Everyone learned new techniques to take back to their studios and classrooms and, of equal importance, they were vitalized by the spirit and attitude of Satsuo Ando – a master.

Ornament Magazine will have a more extensive report of this workshop in a forthcoming issue.

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MARGARET DE PATTA: IN RETROSPECT

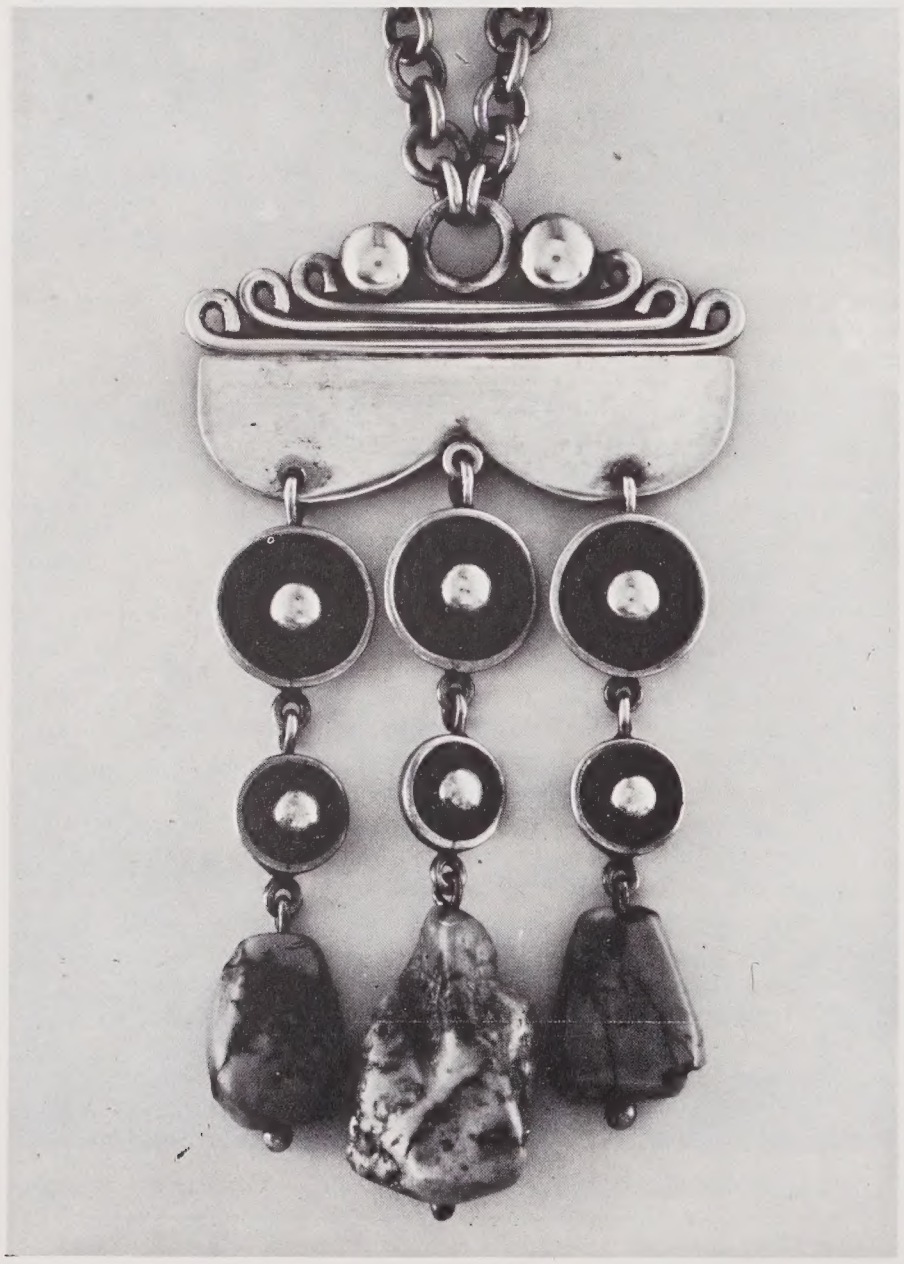
by Yoshiko Vchida

(Excerpted from The Jewelry of Margaret de Patta, Oakland Museum, 1976.)

Margaret De Patta spoke of her studies in Chicago and the influence of its Bauhaus philosophy as the most important educational experience of her life. It was from this period that she intensified her focus on the tremendous potential of non-objective visual and spatial concepts in jewelry design.

The dominant element in her approach to total design now became the projection of three-dimensional space where each element was utilized not only for its own importance, and for its effect on the whole, but for its relevancy to the satisfactory solution of a spatial problem.

Margaret de Patta, Pendant Necklace, 1930, Sterling, turquoise



She was particularly influenced by and attracted to architecture, and might indeed have become an architect had she not turned her talents to jewelry. The structural and spatial viewpoint which dominated her jewelry reflected these learnings, and the movement of lines and planes in space were the elements that best projected the quality she sought in her work. The open steel structures, the cantilevers, the floating structures of contemporary architecture were all aspects which found strong application to her work.

To further articulate and intensify her space concept, she experimented with the conscious use of movement in her work. She designed pins, for example, with moving parts that could be worn in three different positions to either cover or reveal two stones and alter the color accents.

Other moving parts such as pivot clasp or hinge might produce positive and negative volume relationships or permit the reversal of a piece from light to dark. Some pins achieved their maximum potential by expanding or changing shape, and there were rings with moving parts that could spin, vibrate or rattle, thereby giving tactile as well as manipulative pleasure to the wearer. The unique qualities of her jewelry were apparent even in pieces she designed for children – some of which would completely disrupt a classroom. Her stunning pieces for adults too, were invariably conversation pieces.

One of Margaret De Patta's major contributions was her totally new utilization of the visual properties of gem stones. For hundreds of years the transparent stone had been cut simply to produce brilliance and sparkle, until it had reached the point of maximum angles of refraction. The use of a stone as a "transparency" captivated her, and employing this approach, she opened completely new avenues of design.

"The fascination of looking into or through an object or material is boundless," she stated. "Add the excitement of optical effects such as magnification, reduction, multiplication, distortion and image reflection, and the function of the gem stone in jewelry becomes one to stimulate the ingenuity and imagination of the designer."

With the use of transparent stones she explored the dimensions of illusion, transmission, area of invisibility, perspective and space enhancement. Sometimes she combined optical effects with texture, as in a pin with a crystal mounted over stainless steel wire screen (to provide texture) which magnified and distorted the screen to produce visual excitement.

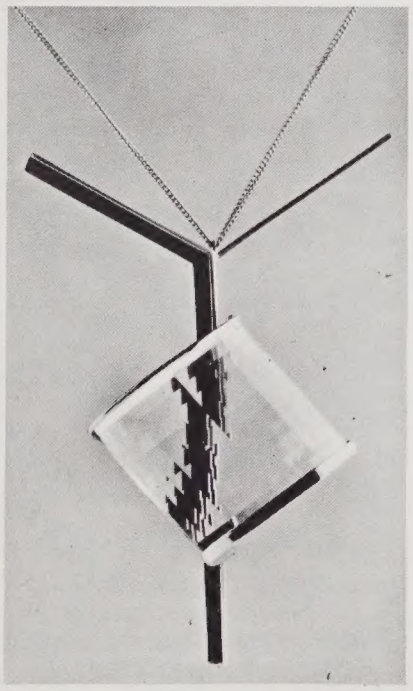
Resisting the use of an object for show or status, Margaret De Patta avoided the ostentatious use of precious stones, employing diamonds, for example, not for their opulence, but rather for compositional enhancement or as an accent of brilliance in combination with other stones.

She made extensive use of such unpretentious stones as crystal, smoky quartz, and topaz which lent themselves well to her original cuts and bold designs. She felt that the wise utilization of the native qualities of stone was a great source of power and richness. She gave new life to rutillated crystal which until then had been little used in modern jewelry, but which she used frequently and purchased in large amounts from Brazil. Its vari-colored hair-like inclusions provided a fascinating and controllable design component which could be reflected, distorted or multiplied according to the angle and placement of a facet.

She sometimes produced an interdependence of stone and mounting by using a transparent stone to reveal an underlying structure, such as the shank of a ring. At other times, the stone revealed a bit of silver or gold pin pointed beneath or was employed to permit the color of a dress to become a positive part of the piece so that different fabrics could vary the visual stimulus.

"Catch your stones in the air," Moholy-Nagy had said to her in Chicago. "Make them float in space. Don't enclose them," and this, indeed, was what she did.

Editor's note: Margaret de Patta was born in Tacoma, WA in 1903 and died in 1964 in Oakland, CA. She was a pioneer in the field of metalsmithing, breaking with the traditional jewelry concepts of her time. JL No. 23, April 1979, carried a more extensive article, but without photographs.



Margaret de Patta, Pendant, 1956, white gold, ebony, quartz

AILEEN OSBORN WEBB DIES AT 87

Aileen Osborn Webb, founder of the American Craft Council and the World Crafts Council died Wednesday evening, August 15, 1979, in her home in Garrison, New York, following a short illness. She was 87.

Often called the "Great Lady of Crafts," Mrs. Webb first became interested in crafts during the economic depression of the 1930's. Then, active in Democratic politics, and interested in human welfare, she organized Putnam County Products, a small cooperative designed to market the wares of rural craftspeople in the Hudson River community where she lived. From this modest beginning, she went on to set up, in 1939, the American Craftsmen's Cooperative Council which, in 1940, opened America House in New York City, a retail outlet for the marketing of American crafts.

In 1941, Craft Horizons magazine (now called American Craft) was first published under her editorship. In 1943, the American Craftsmen's Council received its charter as a non-profit educational organization which Mrs. Webb chaired until 1976. In 1956, she established the Museum of Contemporary Crafts (now called the American Craft Museum) in New York City. The School for American Craftsmen, founded in 1944 under her leadership, is now part of the Rochester Institute of Technology.

With a limitless world vision and an unfailing belief in the value of craft in our industrialized society, Mrs. Webb founded the World Crafts Council, a UNESCO affiliate, in 1964. First as its president and then as an honorary officer, she was involved in the organization until her death.

Active as an author, lecturer, spokesperson and patron for the crafts, she was the recipient of honorary degrees from California College of Arts and Crafts and Dartmouth University and received numerous awards for her contribution to the crafts. Until recent years she remained active as a potter in her summer home.

Born in 1892, and wife of the late Vanderbilt Webb, she is survived by four children and many grandchildren and great grandchildren.

A memorial service will be held in New York City on November 8, 1979.

A memorial fund is being established to foster international communication and exchange between craftspeople throughout the world.

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OPPORTUNITIES

EXHIBITION OPPORTUNITIES

The Craft Center in Worcester, MA is always looking for serious craftspeople interested in serving as part-time adjunct faculty or weekend workshop leaders. We are looking particularly for programs in ceramics, metalsmithing, wood-working, calligraphy, stained glass, enameling and super 8 movie-making, but craftspeople in any field may send inquiries. Interested teachers should send a resume and course or workshop proposal to: Educational Coordinator, Craft Center, 25 Sapamore Rd., Warcester, MA 01605.

Helen Drutt is planning a major invitational metal exhibition in 1981. Work is presently being reviewed and material can be forwarded to: Helen Drutt, Director of Moore College of Art Gallery, 20th & Race Sts., Philadelphia, PA 19103.

THE ART OF THE BLACKSMITH TODAY

The Metalwork Department of the Victoria and Albert Museum is organizing an international exhibition of work by contemporary blacksmiths which will be held in one of the special exhibition areas on the ground floor of the Museum (64 x 36 sq. ft.) in September and October, 1981.

The main display will be supplemented by large-scale photographs, models, samples and designs. The emphasis will be on original ideas, however simple, and the quality of their execution. It is possible that ideas from different craftsmen may be combined in a single piece or group. The main aim is to demonstrate the artistic potential of forged metalwork and to show the quality and variety of work being produced from original designs by craftsmen using all the modern tools and techniques available.

The V & A will be inviting well-known artist craftsmen from abroad to contribute, and will be very pleased to hear from any smith in this country.

Work, or ideas for work, for inclusion in the exhibition will be selected by a special committee of assessors which will meet to make a preliminary selection of proposals submitted at the end of January, 1980. The exhibition-organizers will then arrange to visit the smiths concerned to discuss their proposals with them in detail. At the beginning of September 1980, the selection-committee will make a final selection of material for inclusion so that contributors will have nearly a year to complete their work before the exhibition is arranged. A large and well-equipped experimental workshop, set up by Messrs. Lund and Robinson, is available to anyone who wishes to work on a project for the exhibition if their own premises are not adequate. Please indicate if you would be interested in making use of this, on the application form mentioned below.

The V & A and the Crafts Council (which is also involved in planning the exhibition) may buy or commission pieces for subsequent exhibition or loan in their respective collections, and they will also be encouraging other organizations and individuals to do likewise. All legitimate transport charges involved in organizing the exhibition will be met by the V & A and the objects will be covered by Government indemnity to agreed valuations during transit to and from the Museum as well as during the exhibition.

Application forms are available from Miss Marian Campbell, Department of Metalwork, Victoria and Albert Museum. Please enclose a self-addressed envelope.

Deadline Date: Oct. 15, 1979, Nov. 16-18, 1979 – The Fourth International Craft Film Festival, all 16mm films dealing with any aspect of traditional or contemporary crafts (with the exception of "How-To" films) are eligible for competion in the festival. "Crafts" here are defined as anything hand-made. For more information and entry blanks, contact: International Craft Film Festival, New York State Craftsmen, Inc., 37 W. 53rd St., New York, NY 10019, (212) 586-0026.

Deadline Date: Oct. 15, 1979, "Young Americans: Metal, a national competition sponsored by the American Crafts Council for young craftspeople between the ages of 18 - 30, working in metal and enamel. The works must be original and executed by the entrant in the past two years. For more information and application, write: Young Americans, Metal, American Craft Museum, 44 W. 53rd St., N. Y., NY 10019.

Sugarloaf's 1979 Shows: for detailed information on these, send full size SASE to: Ms. Deann Verdier, Director, Sugarloaf Mountain Works, Inc., P. O. Box 319, Poolesville, MD 20837:

1. Nov. 16 - 18, Gaithersburg, MD, "4th Annual Autumn Crafts Festival" at the Montgomery Co. Fairgrounds; space fees $100.
2. Dec. 7 - 9, Gaithersburg, MD, "2nd Annual Winter Crafts Festival" at Montgomery Co. Fairgrounds; space fees $100.

Deadline Date: Nov. 1, 1979, Feb. 3 - Mar. 2, 1980, Concepts in Metal: The Figure, open to any craftsperson in U. S., for more information write: Mary Lee Hu, Art Dept., Michigan State University, East Lansing, MI 48824.

Deadline Date: Dec. 10, 1979, Mar. 2 - April 6, 1980, "Copper 2" The Copper, Brass and Bronze Exhibition. National, competitive, to encourage works of copper and copper alloys. $5,000 cash prizes. Entry fee $10. For more information contact: Professors Croft and Cardinale, Copper 2, Museum of Art, University of Arizona, Tucson, AZ 85721.

Creative Fairs presents the following shows:

1. Nov. 16 - 18 – "5th Annual Harvest Crafts Festival," Nausau Coliseum, Uniondale, LI, NY.
2. Nov. 25 – "Super Crafts Sunday," 111 Meadowlands Complex, East Rutherford, NJ.
3. Nov. 30 & Dec. 1 - 2 – "NY Contemporary Craft Exposition," Park Ave. Armory, NYC, NY.

(These shows are juried by slides. Fore more information, write: Creative Faires, Ltd., P. O. Box 1688, Westhampton Beach, NY 11978.)

Feb. 2 - Mar. 15, 1980, "It's About Time," a national competition and exhibition of handmade one-of-a-kind clocks, clock movements and time-related craft objects to be held at the Craft Center Gallery. Juried by slides; for a free prospectus, write: It's About Time, Worcester Craft Center, 25 Sagamore Rd., Worcester, MA 01605.

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PUBLICATIONS

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This complete marketing guide for crafts lists over 3,500 craft buyers. Each listing gives the buyer's name, address and special needs. Craft organizations, associations, and apprenticeships for craftworkers are also listed. Order from: Writer's Digest Books, 9933 Alliance Rd., Cincinnati, OH 45242. 672 pgs. $11.95.

INDEX OF CRAFT FILMS

A comprehensive listing of more than 1,000 16mm films on crafts can be found in Craft Films: An Index of International Films on Crafts.

The Index is a permanent information bank of craft films produced world-wide, providing film title, release date, running time, language, distributor, director, producer, and description of contents. Entries are arranged alphabetically by title, and there is a subject index with more than sixty-five headings ranging from Basketry to Bread Baking and Goldsmithing to Woodworking. An addendum of videotapes, a directory of distributors, and an "Index to Artists and Craftspeople" are also included.

Craft Films: An Index was compiled and edited by Kay Salz for New York State Craftsmen, Inc. and supported by the National Endowment for the Arts. Order from Neal-Schuman Publishers, 64 University Place, New York, NY 10003. Hardcover $19.95 plus $1 shipping and handling.

CANADIAN AUTOBIOGRAPHY

Adrift on Course, by Jerrold Morris, gives an overview of the author's life: from his London school days to his final position as director of the Morris Gallery in Toronto. Order from Lynwood Book Services, 77 Mowat Ave., Ste. 208, Toronto, ONTARIO M6K 3E3. $7.95 plus $1 postage if only ordering one book. Usual discounts to the trade.

TECHNICAL PAPER BOOK TO BE AVAILABLE

SNAG is now in the process of assembling a book that will contain all of the technical papers presented at past conferences. This book would be an excellent addition to any school or personal library and will sell for around $7 - $10. To reserve your copy and to insure that a sufficient number are printed, write Tom Markusen, 17218 Roosevelt Highway, Kendall, NY 14476, stating how many copies you would like to order.

THE CRAFTS REPORT

The Crafts Report, the newsmonthly of marketing, management and money for craft professionals. For subscription information, write: The Crafts Report, 700 Orange St., Wilmington, DE 19801.

FILMS AND SLIDES

Behind the Fence – Albert Paley: Metalsmith. This half-hour documentary of the attitudes and work of Albert Paley concentrates on the year long construction of the eighty-foot ornamental iron fence for Hunter Museum of Art in Chattanooga, Tennessee. It also discusses his jewelry and iron and brass gates commissioned by the Renwick Gallery of the Smithsonian Institution. Available from: David Darby Productions, 3028 Rockmont Ave., Claremont, CA 91711. Rental fee - $55. Purchase price $350.

CORRECTION

Please note the "American Sheffield Plate" column on page 15 and the entire page of 33 in August Goldsmiths Journal No. 25 was contributed by The Silver Institute.

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UPCOMING EVENTS

CONFERENCES

Oct. 25 - 27, Southeastern College Art Conference, Georgia State Univ., Atlanta. For more information contact: Cathy Fox, (404) 658-2257, at Georgia State Univ., Atlanta, GA 30303.

Nov. 16 - 18, The Fourth International Craft Film Festival, to be held at the Fifth Avenue Cinema in NYC in cooperation with the New School for Social Research. The festival is being sponsored by New York State Craftsmen, Inc. For more information, write them at: 37 W. 53rd St., N. Y., NY 10019, (212) 586-0026.

May 20, 1980, Jewelry - Metalsmithing European Tour. Paris, Idar-Oberstein, Pforzheim, Copenhagen, London. For preliminary itinerary, write: Frances Pickens, 1471 Kalaepohaku St., Honolulu, HI 96816.

January Seminar '80 – Plymouth, NH. Each January the League of New Hampshire Craftsmen offers six days of masters-level workshops for the advanced studio craftsman. Seminar '80 is one of the few programs in the United States which challenges studio craftsmen and craft educators to come out of their studios and immerse themselves in six days and nights of intense living and working with other advanced craftsmen under the direction of prominent leaders in their field. The emphasis is on new directions in each craft area and intermedia interaction.

Now in its seventh year, Seminar '80 is just one aspect of the forty-eight year old League's ongoing programs. More than one hundred craftsmen and craft educators from across the U. S. and Canada are expected to attend this event. The six workshops, to be held January 20 - 26, 1980, will take place at Plymouth State College in Plymouth, New Hampshire, a small and picturesque college town in the center of the state.

Seminar '80 workshops will focus on six areas, two of interest to metalsmiths: Jewelry: "Textile Structures Using Metal Foils," taught by Arline Fishe, California jeweler and metalworker, founding member of SNAG; Blacksmithing: "Aesthetics for Iron," with Chris Ray, blacksmith and sculptor, known for his "Mansect" series of raised and hollow forms.

For more information on Seminar '80, contact Evelyn Zimmerman, Education Coordinator, League of New Hampshire Craftsmen, 205 North Main Street, Concord, NH 03301.

FORGING IRON: INTERNATIONAL CONFERENCE/WORKSHOP – IRONBRIDGE GORGE MUSEUM AND HEREFORDSHIRE TECHNICAL COLLEGE JULY 23 - 29, 1980

The Crafts Council's second international conference and workshop will be devoted to the blacksmith's art of forging iron. It will be held from July 23 to 29, 1980, at Ironbridge Gorge Museum, Telford, Salop and Herefordshire Technical College, Hereford.

The conference is intended for professional blacksmiths who have already reached a high level of technical skill and are actively seeking ways of developing new designs and new approaches in their work. Some places will also be set aside for others, such as architects and interior designers, who are not full-time craftsmen but who work with the materials and techniques of the craft.

It is expected that two-thirds of the participants will come from the British Isles and the remainder will attend, by invitation, from many other parts of the world. We are delighted to be able to announce that two distinguished artist blacksmiths from the Continent, Professor Antonio Benetton from Treviso, Northern Italy and Manfred Bergmeister from Ebersberg near Munich, will be giving key lectures at the conference. There will also be a group of smiths from the USA, where the craft is enjoying a vigorous revival. Participants will also be invited from France, Spain, E. Europe, Scandinavia and the Far East.

A conference of this nature, which aims at a highly professional and intensive exchange of information and ideas, has to be limited to be effective and manageable. Accordingly, attendance will be by invitation. Any full-time professional blacksmith who has already filled in the Council's questionnaire on the conference and indicated an interest will have the opportunity to attend and will receive a booking form with this announcement. Others are asked to write to Caroline Pearce-Higgins, Education Officer at the Crafts Council, at the address below, stating the nature and extent of their professional interest in contemporary blacksmithing. Practicing craftsmen are asked to send not more than 10 slides or photographs of their work, which will be returned. Closing date for applications is October 30, 1979, and all applicants will be notified of their position in January 1980. The Crafts Council apologizes at this stage for any disappointment this arrangement may cause.

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WORKSHOPS

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Greenwood Gallery, American Craft Council:

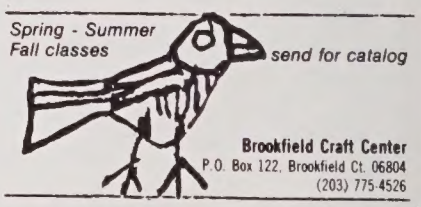
Photoetching – Eleanor Moty
October 13 & 14

New Directions with Old Techniques – Harold Helwig
October 19 - 21 (covers Limoges and Basse Taille)

Shell Structures – Heikki Seppa
November 3 & 4

Constructivism in Jewelry –
Deborah Aguado
November 17 & 18

For more information, write:
Greenwood Gallery, Suite 905
1025 Connecticut Ave., N. W.
Washington, DC 20036
(202) 833-2910



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EXHIBITIONS

The following exhibits will be held at concepts in Carmel, CA:
Paul Mergen - Oct. 5 - Nov. 4
Edward De-Large - Nov. 16 - Dec. 30
Helen Shirk - April 4 - May 4, 1980
Lynda LaRoche and David Rodgers - May 30 - June 29, 1980
Wendy Ramshaw and David Watkins - Oct. 10 - Nov. 16.

Los Angeles, CA, Faberge Show, June 7 - Oct. 28; The show then moves to Peoria, Illinois, from Nov. - Jan. 1980.

Gatlinburg, TN, "Gatlinburg Craftsmen's Fair," Oct. 12 - 21, to be held at the Civic Auditorium, for more information contact: Everett Brock, Craft Center, Box 1776, Parkway East, Gatlinburg, TN 37738.

Asheville, NC, 32nd Annual Guild Fairs, Oct. 17 - 20, to be held at the Asheville Civic Center.

Gaithersburg, MD, National Craft Fair, Oct. 17 - 21, to be held at Montgomery County Fairground.

St. Louis, MO, "15th Anniversary Multi-Media Members," Dec. 2 - Jan. 2, to be held at the Craft Alliance Gallery.

St. Louis, MO, "Soft Objects & Enamels," Jan. 6 - 30, to be held at the Craft Alliance Gallery.

Washington, D. C., "The Art of Russia: 1800 - 1850," Aug. 3 - Nov. 11, to be held at the Renwick Gallery, Smithsonian Institute.

Washington, D. C., "Jewelry by Irena Brynner, Sept. 28 - Jan. 13, at the Renwick Gallery, Smithsonian Institute.

North Dartmouth, MA, National Clay/Fiber/Metal Invitational Exhibition, Nov. 4 - 21, Southeastern Massachusetts University Art Gallery.

Philadelphia, PA, "The Third Annual Philadelphia Craft Show," Nov. 15 - 18, Memorial Hall, Fairmount Park.

London, Ontario, Second Annual London Christmas Craft Sale, Dec. 5 - 9, Progress Bldg. Western Fairgrounds.

Layton, NJ, The Gallery Peters Valley, presents the following exhibits: Fine Forgery - Oct. 6 - Nov. 7; Sacred & Ceremonial - Nov. 17 - Dec. 24.

Asheville, NC, "32nd Annual Guild Fairs;" Fall Fair - Oct. 17 - 20; Asheville Civic Center.

Toronto, Canada, "The Treasures of Tutankhamun," Nov. - Dec., to be held at Art Gallery of Ontario, only Canadian showing of this exhibition.

"Silver in American Life;" High Museum of Art, Atlanta, GA - Nov. 3 - Dec. 31; Amon Carter Museum, Ft. Worth, TX - Feb. 8 - Apr. 13, 1980; Milwaukee Art Center, Milwaukee, WI - May 16 - June 20, 1980; Virginia Museum, Richmond, VA - Sept. 19 - Oct. 19, 1980; St. Louis Art Museum - Dec. 6, 1980 - Feb. 1, 1981; Los Angeles Museum of Art - Mar. 5 - May 10, 1981; Cleveland Museum of Art - June 24 - Aug. 16, 1981; Denver Art Museum - Sept. 23 - Nov. 15, 1981; Fine Arts Museum of San Francisco, M.H. deYoung Memorial Museum - Dec. 19, 1981 - Feb. 14, 1982; and Detroit Institute of Arts - Mar. 24 - May 16, 1982.

Asheville, NC, Southern Highland Handicraft Guild Fair, Oct. 17 - 20, to be held at the Civic Center.

Windsor, Ontario, Second Annual Windsor Christmas Craft Sale, Nov. 23 - 26, at the Cleary Auditorium.

Framingham, MA, "Containers," Nov. 1 - Dec. 31, Danforth Museum.

Baltimore, MD, "The Fourth Annual Winter Market of American Crafts," - Feb. 16 & 17, New Baltimore Convention Center.

New Haven, CT, Eleventh Annual Christmas Exhibit & Sale, Nov. 9 - Dec. 23, 80 Audubon Street.

Gaithersburg, MD, 4th Annual Autumn Crafts Festival, Nov. 16 - 18, Montgomery County Fairgrounds.

Gaithersburg, MD, 2nd Annual Winter Crafts Festival, Dec. 7 - 9, Montgomery County Fairgrounds.

Washington, DC, "Irena Brynner: Jewelry Since 1953," Sept. 28 - Jan. 13, Renwick Gallery.

Rochester, NY, Earrings by 6 Artists, Sept. 7 - Nov. 10, Gallery of Contemporary Metalsmithing.

London, England, Schroder Collection, Oct. 10 - Oct. 26, Goldsmiths' Hall.

Portland, OR, Holiday Festival, Nov. 30 - Dec. 24, Contemporary Crafts Gallery.

Montpelier, VT, Craft Professionals of Vermont, Oct. 4 - Nov. 3, at the T. M.

Marietta, OH, 8th Annual Craft and Sculpture Exhibition, Oct. 27 - Nov. 25, Marietta College.

Cambridge, MA, Tina Johnson-Depuy: "Full Moon" bags, jewelry & fiber, Nov. 10 - Nov. 24, Mobilia Gallery.

San Francisco, CA, Cloisonne Jewelry - Laura Popenoe; Gold Works - Glenda Queen; thru Jan. 1, Union Street Goldsmith.

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EDITORIALS

Dear Members:

We received numerous responses to Bonnie Deutsch's question regarding chain making literature (Journal No. 23). The Kulicke Starke Academy of Jewelry teaches chain making as an artform. Their address: 2231 Broadway, NYC 10024, (212) 362-8633. Below are listed recommended books:

Chain Making, Robert W. McOmber, 39-page booklet – carefully explains how to make a variety of chains from jump rings. Available from 2207 S. 208th St., Seattle, WA 98188.

Jewelry Making, Murray Bovin, pp. 136 - 140 – includes illustrations of 17 different kinds of chains and how to make them.

Contemporary Jewelry, Philip Morton, pp. 178 - 179 – illustrated steps for Roman loop-in-loop.

Other sources mentioned only one time include:

Unit Jewellery, R. L. L. B. Rathbone, Great Gritain, 1921.

Small Jewelry, F. R. Smith, London, 1931.

Chains and Beads, Greta Pack, V. Nostrand Co., NY, 1951.

Your Jewellery, J. Leslie Auld, London, 1951.

Jewelry Making as an Art Expression, D. K. Winebrenner, 1953.

Ideas for Jewelry, Ian Davidson, 1973.

Silverworks and Jewelry, H. Wilson, England, 1971.

The Design and Creation of Jewelry, Robert von Neumann.

Creative Gold-and Silversmithing, Sharr Choate.

The Technique of Jewellery, Rod Edwards, Scribner's Sons, NY, 1977.

Metalworking for Jewelry, Tim McCreight, V. Nostrand Reinold, 1979.

The Editors

LETTERS TO THE EDITOR

Dear Editor:

The August issue of the Goldsmiths Journal arrived today and I am delighted, to say the least. While few will know, I'm pleased that we contributed even to the cover.

Anne's review of Brookfield 25 was concise and the pictorial coverage, great. As she mentioned, we are trying to develop a more comprehensive metalsmithing program at Brookfield. The August issue should give added momentum to this effort.

Many thanks.

Harvey Jeacock
Director, Brookfield

Editor's note: Joel Bangal's "Resolution of a Mandala" scent bottles, pictured on our August issue cover, was shown at the Brookfield 25 Exhibition.

Dear Editor:

Thanks so much for the mention of The Crafts Business Encyclopedia in the August issue. The whole issue was, once again, a marvelous piece of work.

One small problem however: I guess the proofreaders were out to lunch when the galley for page 15 came through. The words "10 or" came out "1000" and and the words "25 or" came out "2500." Oh, if only I could sell books in lots that big, I'd retire.

If you could run a correction in the next issue to indicate the Encyclopedia discounts do NOT require purchases of 1000 or 2500 books, but rather 10 or more, 25 or more, I'd be most grateful.

Michael Scott, Editor
The Crafts Report

Editor's note: We think this sounds like a rather 'large' problem – please forgive us and notate the corrected version below:

"The Crafts Business Encyclopedia" by Michael Scott has been published in a soft cover edition by Harcourt Brace Jovanovich at $3.95. This new edition contains the most important current information marketing techniques and money management for craftspeople. Since the hard cover edition was published two years ago, "The Crafts Business Encyclopedia" has been widely acclaimed as "the best of the batch of craft business books." Schools and organizations which use the book as a text in workshops, seminars, and classes are entitled to a 10% discount on quantities of 10 or more, or a 15% discount on 25 or more copies. This "Encyclopedia" can be ordered by mail from: Book Department, The Crafts Report, 700 Orange Street, P. O. Box 1992, Wilmington, DE 19899. Prices: Hard cover – $10 plus $.50 postage. Soft cover – $3.95 plus $.45 postage. Quantity prices: $3.55 plus $.25 postage per copy for 10 or more; $3.35 plus $.20 postage per copy for 25 or more.

Dear Editor:

For link chains:

Determine how many links to be used, wind jump ring coil and cut with saw. Divide links into two equal piles and arrange half on a block and solder with hard solder (wire, 26 ga.). I use a 'little torch' as found in many welding shops with a No. 3 tip.

With rest of links, assemble the chain so that every other link is soldered. Using hooks of 12 gage iron wire (or whatever is appropriate) hang unsoldered links on hooks with spot to be soldered on its side, not top, and solder links (with medium solder, wire 26 ga.). Keeping spot to be soldered on its side assures that the link will not solder to hook. Using this method, one will rarely, if ever, solder links together. On fluxing – I usually dip entire chain in Prip's flux before soldering – much quicker and easier than individually fluxing each link. Using this method, I can make a 100-link chain, start to finish, in 1½ hours.

Peter Handler

Dear Editor:

We have written confirmation from D. Bessinger, the stone dealer, that "most every lapis lazuli stone coming out of Idar-Oberstein, Germany, has been treated." Tests of several lapis sold through 'reliable' dealers have shown color loss onto resting surfaces after contact with a solvent. In cases where the color does not come away onto other surfaces, we found considerable surface dulling.

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BUYERS AND SELLERS BEWARE

Dear Editor:

On January 1, 1978, I submitted $12 for a subscription to Ornament magazine. On June 2, 1978, I wrote to them requesting more than a promotional announcement for the forthcoming issue. In April 1979 (15 months later), I received the issue, but have not heard from them since, except seeing the myriad advertisements placed in several other magazines.

I feel their time is up and have requested a full refund.

Alan Revere

Dear Editor:

Congratulations on printing Dr. Henry Kesselman's letter, re: Aaron Faber Gallery, NY. It appears no other craft magazine is willing to take a stand against unscrupulous galleries.

Galleries that do not pay or at least not on time, send out checks that bounce, tell you they mailed your check, but it must have gotten lost, etc., create an unpleasant situation for the artist – to say the least! Isn't it enough that we create, market, photograph and consign our work, without having to beg for our final compensa tion? Personally, I believe it is!

I will not do further business with any gallery that rips me OR my fellow craftsperson off – and I would like to encourage other readers to do the same. Otherwise, less than honest galleries continue to thrive, hurting us all.

I hope you will be receiving more letters of the kind Dr. Kesselman wrote, so that we, as working craftspeople, can be forewarned.

Colette

Dear Editor:

I dealt with Edward Faber and his various partners for about ten years. Very rarely was I paid on time, unless I made a personal appearance and requested payment. Since I have moved to California I am no longer able to perform collection duties, and I no longer show at his gallery.

The Aaron Faber Gallery could be a national showplace for contemporary art in precious metals. But I do not think this will happen. When seasoned and mature artists are 'burned' by slow or no payment, they find alternate exposure. They rapidly wise up to gallery/shop keepers who use their artists as bankers, burdening them with bank loan interest they should carry themselves. It is the young newcomers, talented and eager for exhibits, who get sucked into the dilemma of getting great exposure and turnover, prestigious peers, and no payment! My sympathy is with them. They often do not have alternative outlets, nor have they collected the impressive resumes which some shopkeepers use as 'guidelines' for choosing exhibitors.

Aaron Faber could be the prime supporter of American Avant Guarde jewelry; instead, it appears to support only Aaron Faber associates.

Carrie Adell

Dear Editor:

I have some 14K yellow gold scrap that has 14K yellow gold solder on it. What I was wondering is: Can I cast this scrap with clean casting grain without problems, such as porasity?

Linda Barba

MEMBER INVITATIONS

Dear Editor:

I would like to offer any help I can give to craftsmen visiting England and extend an invitation to have them visit the City of London Polytechnic Cass School of Art anytime during the school session.

I am becoming more and more out of touch with the American Crafts movement and would like to meet craftsmen and discuss things before I return to the States and hopefully make my living as a craftsman.

Mark Frankel (SM)
379 Chiswick High Rd.
London W4 / 4AG
ENGLAND

Dear Editor:

As you already know, my wife Mitsuko and I have just opened PRECIOUS OBJECTS GALLERY, in Los Gatos, California. It is located halfway between San Francisco and Carmel, on the Monterey Peninsula.

PRECIOUS OBJECTS, is a selling gallery that has periodic exhibitions of individual and group shows of jewelry, hollow ware and enameling. We also have a continuing presentation of our own work and the work of other goldsmiths who consign work to us. We opened August 11, with a show by 16 goldsmiths from California and the East Coast.

We are delighted for the opportunity to exhibit the finest work we can find, and in this regard, we are interested in seeking highly crafted, wearable jewelry, hollow ware and other art objects of the goldsmiths art, from the membership of SNAG.

Goldsmiths who are interested in exhibiting consigned work at PRECIOUS OBJECTS GALLERY, may write to us at the address below. Mitsuko and I also extend a cordial invitation to all lovers of precious objects, to visit us when in the Bay Area, and see a fine selection of contemporary metalsmithing. Warm regards.

Walter Soellner
Precious Objects Gallery
39½ North Santa Cruz Ave.
Los Gatos, CA 95030
(408) 395-3411

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TECHNICAL INFORMATION

HOW TO GET THE MOST OUT OF YOUR INVESTMENT MATERIAL

by James E. Erwin
(reprinted courtesy of American Jewelry Manufacturer)

How is a good investment made? What are its properties, and how can the caster best utilize these qualities? Here's an investment primer . . . . . .

A chain is only as strong as its links, and an investment is dependent on the raw materials which go into it. Taking as an example Kerr Satin Cast, we'll see what it's made of, how it's manufactured and then, how these properties contribute to the final quality casting.

Every ingredient is tested before it goes into each batch. The storing of hundreds of tons of various raw materials is done at Kerr's refractory plant. Gypsums must be aged to reach a stable condition before use. All silicas must be checked to assure that no contamination has occurred. Cristobalite must be ground to the correct particle size distribution, and Kerr uses ball mills for this purpose. All ingredients are mixed by precise formula.

At this point, quality control becomes a key factor in producing a consistently high-quality investment material. As manufacturing proceeds, several representative samples of each raw material and investment batches must be tested thoroughly, and test results evaluated.

Sedimentation and screen analysis are major determinants of the particle size of all raw materials. In turn, uniform particle size contributes to a fine, even investment mixture which will produce strong molds and smooth casting surfaces. Screen analysis measurement is accomplished by flushing finely-ground raw materials through laboratory screens. There are six graduated screen mesh sizes through which the moistened powders must pass.

First, the test batch of powder is carefully weighed, and then it is wet down with a small laboratory hose. As each finely calibrated screen collects particles, it is removed from the stack, dried in an oven and the powder content is removed, re-weighed and tallied on a testing work sheet. If too much material is captured because it won't sift through the fine mesh screens, that batch of raw material is rejected. Each material must meet exact specifications.

Only after all tests are performed on the raw materials, and they meet Kerr's rigid specifications, they are OK'd for investment production. Twin shell and air blenders are used to mix batches of raw material to Kerr's formulation. Again, after production is complete, a blender sample returns to the quality control lab for still further testing. Slump is measured first.

"Slump" refers to the characteristic "flow" of an investment slurry when it is first mixed with water. The resulting slurry is placed in a special flask-like ring. At a pre-set time, the ring is lifted and the slurry "slumps." The investment must maintain uniform slump measurements. If the slurry has no body and "slumps" too quickly, the investment in use will have insufficient mold strength and therefore must be rejected.

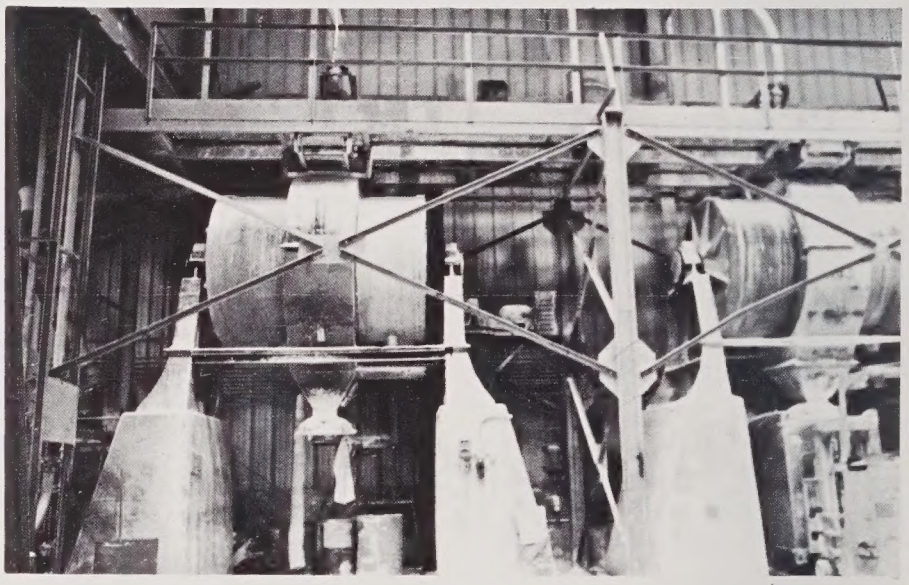
Work time is measured next. Since the time in which a caster has to mix his investment and pour his flasks is critical, the investment work time must be consistent. In conjunction with testing of the work time, a Vicat set test is made. This determines how soon the material becomes hard from the start of the mix.

Setting expansion is measured by pouring an investment slurry into a trough, and measuring the lateral volume expansion during the two hours after the investment sets up and becomes hard.

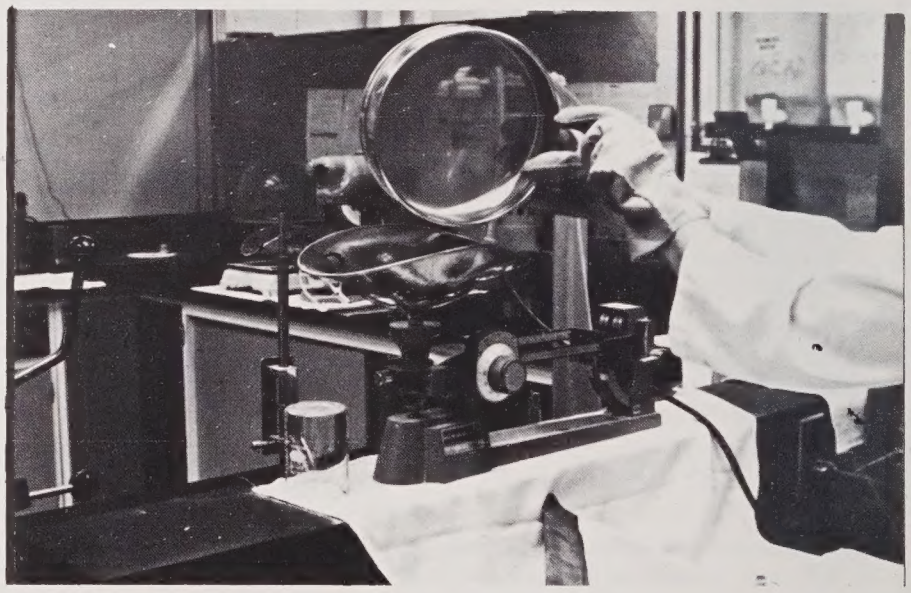
Every batch is also tested for vacuum rise. Kerr's quality control technicians place commercial size batches of investment on a vacuum table under a bell jar, and measure the rise and fall characteristics of that slurry. This determines how fast and how well the air is removed from the slurry.

Thermal expansion of the investment is measured by a Theta Dilatometer. This thermal expansion is very important because thermal expansion compensates for the contraction of the cast metal during solidification.

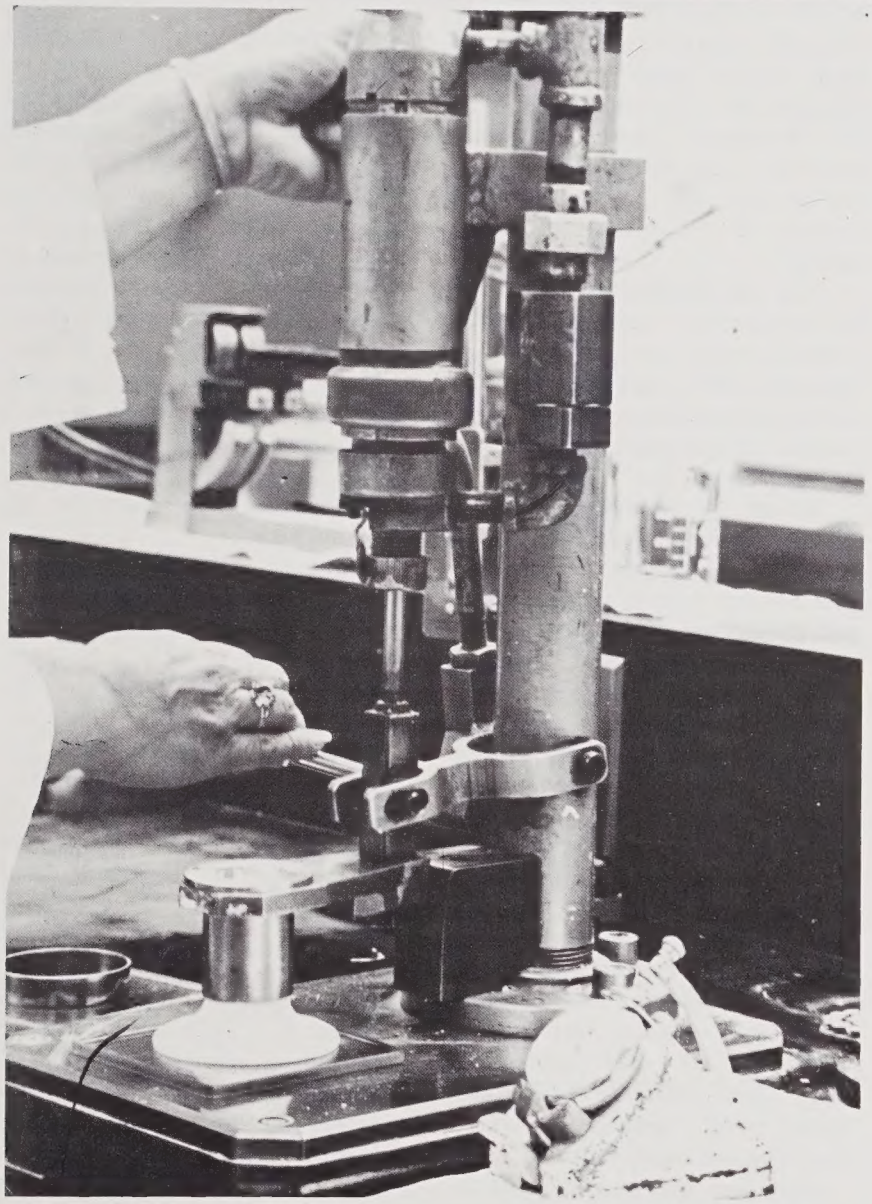
The crushing strength of investment ingredients is tested on an Instron. This machine measures the mold strength of the investment at casting temperature.



Large ball mills grind the cristobalite used in investment into the required particle size distribution.



Sedimentation and screen analysis tests are used to measure the raw material particle size and distribution.



A slump test is used to measure the flow of investment slurry. If the slurry has no body and slumps too quickly, the investment will have insufficient strength in use.

With these important quality control checks passed, only then is the investment ready to be packaged. As the large blenders empty to fill the drums and containers, a "package sample" is drawn off the line and returned to the lab for one final – and most important – test: Actual castings are made with each of these sample batches.

Kerr casts for quality control purposes only. Kerr technicians use heavy class ring patterns, comparable to those produced by the manufacturing jeweler. All casting procedures and techniques are designed to duplicate those of the customer in his own factory. Each flask is marked with the batch code number and each resulting casting is also marked, for cross-checking.

If the investment produces a clean, sharp, nodule-free casting (an exact duplication of the invested patterns), the newly-packaged batch is released for shipping. Should for any reason the quality control specifications not be met, the shipment is put on "hold." After rechecking and recasting, if this batch proves non-correctible, it is disposed of entirely so that such material can never be supplied to a casting customer.

These painstaking steps in quality control assure customers of receiving only quality products from Kerr. Products which are consistently reliable have built Kerr's reputation among jewelry investment casters throughout the world.

MAXIMIZING YOUR RESULTS–

The jewelry caster must have a consistently reliable investment if he is to enjoy consistently high quality casting results. Frequently even high quality castings may be improved upon. Let's review a few working suggestions which can help the caster get the most out of his investment. And to understand better how to use an investment, it is best to know what goes into the making of quality jewelry investment.

There are three BASIC components in a quality jewelry investment – plus several additives. The first major ingredient is silica which is pure and ground to a very fine particle size. The purpose of silica is to cushion the investment while it's being heated during burnout, and being cooled just prior to casting.

The second basic component is cristobalite. This is a high-expanding form of silica. It allows the investment mold to expand during burnout when the wax is being eliminated from the mold. This expansion is also needed to compensate for the shrinkage of the cast metal during solidification.

The third basic ingredient is gypsum, a hydrated calcium sulphate. Gypsum is the binder in a quality jewelry investment. When used in Satin Cast, for instance, the gypsum is calcined and is in a hemihydrate form. This means that 75% of the water has been removed from the gypsum. As a result, it is continuously trying to regain this lost moisture. When water is added to it, the gypsum returns to its original hydrated form.

Lastly, there are several additives in a modern jewelry investment. These are beneficial in controlling certain characteristics of the investment components themselves. Some additives control the setting time of the investment. Some are wetting agents which increase the flow capacity of the slurry. Among other additives are defoaming agents, which help in removing air from the investment slurry when vacuuming (or vibrating) the bowl and flask.

HANDLING INVESTMENT –

Be sure to keep the investment as dry as possible prior to use. Remember that the calcium sulphate is constantly looking for the water that has been removed from it. This is why investment is packaged in a plastic liner within the drum. This plastic bag should be closed at all times when not in use. Also important is keeping the LID on the drum or container when not using the investment.

There are several signs that indicate that your investment has become hydrated (absorbed moisture) before you use it. First, you'll notice a substantial extension of the work time. It will take the investment a longer time than normal to set up. When it does set up, the mold itself will be substantially weaker than it should be. There may be an unexplained roughness on the surfaces of your

castings. And occasionally you'll have finning and flashing. To avoid all this, always keep your investment as dry as possible until it is used. Should your investment ever become hydrated, it is best to discard the remainder of the drum and to open a new drum of investment.

Be sure to weigh your investment to the manufacturer's specifications. Don't eyeball it! The additives in an investment can confuse the eye. The slurry may appear to be thinner than it really is. As a result, the unwary investor may continue to add more powder, causing additional investment problems because he is upsetting the recommended water/powder ratio which he should follow. For this reason, the water and the powder should always be weighed.

Be sure to add the investment to the water, not vice versa. The water in the bowl serves to distribute more evenly and wet the particles of investment quickly. This allows your slurry to attain a smooth, even consistency. If you reverse this procedure by adding water to a bowl of powder, the investment may "ball up" in its hurry to absorb water, and mixing becomes very difficult. Therefore, always add the investment to the water, not vice versa.

Be sure to know your investment's work time and invest within it. One of the most important characteristics of a quality investment is its work time. Most Kerr investments, for instance, are manufactured with a work time of 9½ minutes, plus or minus 30 seconds. When the investment undergoes quality control tests, the lab specifications are for use with 40 parts water to 100 parts powder and a 74 degree F water and powder temperature. Following these directions, the time an investor has to mix the slurry, vacuum the slurry, pour and vacuum the flasks, cap the flasks and set them aside to dry is between nine and ten minutes. But it is suggested that the caster customize his investing cycle. Here's how:

When you open a new drum of investment, note your initial investment mix. The manufacturer recommends 74 degrees F water and investment be used. If your slurry is hotter because of warmer water or powder your work time will be shorter. If you use 38 parts water, you'll get LESS work time. If you use 41 or 42 parts water, you'll increase the length of your work time. Also, if the slurry is colder, the work time will be extended and the investment will not set up as quick'y.

Let's review this customizing process, with reference to typical situations that arise for the investor. Maybe you've experienced this problem: You were in the final investing stage, perhaps when vacuuming or capping the flask, and you saw the investment was beginning to set up. You probably moved quickly to finish it off and possibly tapped the table and flask to smooth out the investment surface. This is risky because it is possible to find thinning and flashing when this flask is cast. That is because you continued to "work" the investment AFTER the work time had been completed. The opposite of this is the investor who rushes through the investing cycle and doesn't utilize the available work time of the investment. In this instance, there may be three or four (or more) minutes after capping before the investment sets up ("glosses off"). In this case, the free water in the flask, being lighter than the powder, is actually climbing to the surface of the flask. As this happens, the wax pattern material, which is hydrophylic (attracts water), retains small channel marks as the water rises past it to the surface. When the investment sets up, these striations (water marks) are left on the pattern and become imperfections on the surface of your casting.

Now the question becomes one of customizing the investment cycle in order to consume the available work time using your regular water/powder ratio, water/powder temperatures and investing equipment.

During this investing process, you should keep track of the time it takes from the point when you first add the powder to the water, mix it, vacuum it, pour it into the flask, vacuum the flask, cap the flask, and put it aside to "set." When water first begins to disappear from around the edge of the flask, it is the "gloss off" or "water loss" time. If you take that total elapsed time, from the time you add the powder to the water until the water just begins to disappear from the edge of the flask, then subtract 1½ to 2 minutes, you have determined the work time of your investment. Again, this is the work time of your investment using your water/powder ratio, water/powder temperatures, and your investing equipment.

For best casting results, it is important to use up the available work time. Providing the investment is mixed a minimum of 2½ minutes, this step can be expanded or reduced to assure that the available work time is "used up." Assume your investment took 12 minutes to "gloss off." Subtracting 1½ to 2 minutes, your investment has a 10-minute work time using your investment procedure. Following this procedure, the investing cycle can be customized, and possible mold cracking from investing and "water marking" can be avoided.

Be sure to leave your invested flasks undisturbed until the investment is set. After capping and setting the flask aside, the investment mold continues to develop additional strength during the first two hours after investing is complete. The pre-burnout strength of the investment mold becomes stronger. If you are using a 3½ by 4-inch flask, allow two to four hours before you start the burnout cycle. Four to six hours is recommended for larger flasks. Given sufficient setting time, the invested flasks are ready for the burnout step.

Be sure to burnout the flasks at temperatures under 1350 degrees F. The final job for a quality investment to perform is to maintain strength and stability during burnout. We've reviewed the components of an investment. Primarily they are silica and cristobalite to absorb expansion and contraction during the heating and cooling of the mold, and gypsum, which acts as a binder for the other ingredients. Burnout should always be conducted at a temperature no higher than 1350 degrees F. There is no need to burnout at greater temperatures, provided your furnace is properly vented and the oven flue is not clogged. Going to higher temperatures can cause problems. This is because the binder (gypsum) in the investment, being calcium sulphate, may become unstable in temperatures exceeding 1500 degrees F (817 degrees C). It is possible that the sulphur may separate from the calcium. This sulphur in turn can combine with any free oxygen to form sulphur dioxide. Now, when you cast metal into this mold, three things may happen. First, with the break-down of the binder, you may get a rough cast surface; second, your cast metal may be extremely brittle; third, the casting itself may be much darker than

usual. This darkening is a result of the sulphur dioxide attacking the surface of the metal and badly discoloring the casting. This discoloration most often cannot be removed, even by using the strongest acid pickles.

Burnout cycles vary according to the size of the flask. A five-hour cycle is ample for a 2½ by 2¼-inch flask; and an eight-hour cycle is suggested for a 3½ by 4-inch flask. At least a twelve-hour cycle is recommended for larger flasks. See chart for suggested burnout cycles according to flask size.

Be sure to keep your flask temperatures above 450 degrees F during burnout. Once the burnout starts and the furnace heat increases, the investment mold contracts. However, the contraction is often not identical to the mold expansion. Therefore, if the flask is allowed to cool below 450 degrees F, it is possible for the mold material to crack during this contraction. This condition is known as the silica inversion point. Once burnout starts, flasks can be left in the furnaces for as long a period as is convenient, providing the temperature of the burned-out flasks is maintained above 450 degrees F (232 degrees C).

WAX ELIMINATION SUGGESTED BURNOUT CYCLES

Select proper burnout cycle according to the size of the flask.

5-HOUR CYCLE	8-HOUR CYCLE	12-HOUR CYCLE
For flasks up to 2½" x 2½" (including J2 & J3 flasks)	For flasks up to 3½" x 4" (including J4 & P4 flasks)	For flasks up to 4" x 8" (including J5, P5 & P6 flasks)
Preheat furnace to 300 deg. F	Preheat furnace to 300 deg. F	Preheat furnace to 300 deg. F
1 hour – 300 deg. F	2 hour – 300 deg. F	2 hour – 300 deg. F
1 hour – 700 deg. F	2 hour – 700 deg. F	2 hour – 600 deg. F
2 hour – 1350 deg. F	3 hour – 1350 deg. F	2 hour – 900 deg. F
1 hour – Reduce	1 hour – Reduce	4 hour – 1350 deg. F
Flask temperature to proper casting level.**	Flask temperature to proper casting level.**	2 hour – Reduce
		Flask temperature to proper casting level.**

**Mold temperature for ladies' rings and items of lacey or intricate design should be 1000 degrees F to 1100 degrees F. Mold temperature for men's rings and items of relatively heavier design should be 700 degrees F to 900 degrees F.

NOTE: Furnace temperature should NEVER exceed 1450 degrees F. as this may affect the investment.

A WORD ABOUT KERR –

The Kerr Manufacturing Co. was established in 1891. Brothers Robert and John Kerr had designed and manufactured a gas-fired furnace for producing dental porcelain jacket crowns and bridges. This proved to be the forerunner of Kerr's present burnout furnaces used in the jewelry lost wax casting process.

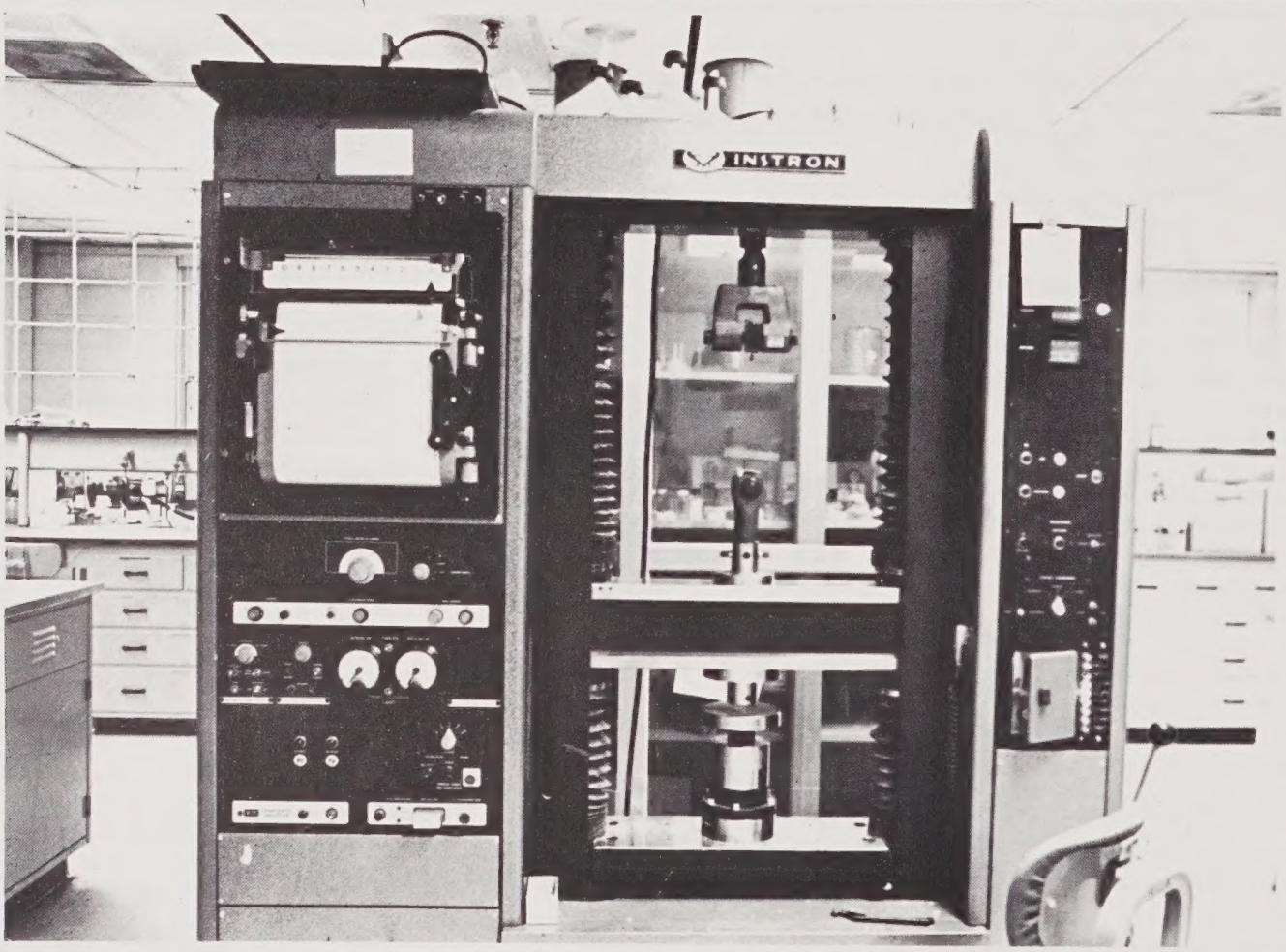
In 1910, a practicing dentist invented a method of casting gold inlays. For this process, Kerr developed a wax for making inlay patterns and a combination of plaster and silica which formed the investment.

During the late 1920's, a group of chemists discovered a new form of silica called cristobalite. This mineral had a higher degree of expansion than previous mold silicas. Because of its higher expansion characteristics, an investment containing cristobalite produced far superior, more accurate precious metal castings. Kerr Cristobalite Investment was patented and introduced in 1932. At this time, the firm expanded the casting product line to include a small furnace for burnout, and the Kerr Centrifico Casting Machine.

By 1936, Kerr built on its experience in the casting of gold inlays and offered the manufacturing jewelers a method of casting gold and silver jewelry. Manufacturing jewelers gradually converted to lost wax casting because it permitted high-volume production in a wide range of designs with a minimum of finishing time. During the next few years, Kerr introduced its first injection wax, the E-Z Flo Vibrator, and investment mixer and a line of preformed wax shapes including wires and sheets.

During World War II, Kerr's experience in the jewelry field led to the development of a process for casting critical radar parts. The actual production of many high priority precision castings was done at the Kerr facilities in Detroit. As many as 5000 castings a day were made between 1941 and 1945.

After the war, Kerr returned to the manufacture of special materials for the casting of both ferrous and nonferrous metals. In 1946, a special vacuum machine was developed by Kerr to remove entrapped air from the investment



The final lab test for Kerr investment is done on an Instron, a machine which measures the crushing strength of the set investment at casting temperatures. After this test, Kerr technicians use the investment to cast actual jewelry pieces. If it produces good castings, it goes onto the market.

mold materials more easily. The use of this vacuum apparatus resulted in even more perfect, nodule-free castings for Kerr users.

In 1948, the Kerr Co. published an instructional guide for the craftsman called Lost Wax Casting – The New Modern Craft, and developed a line of specialty waxes to assist in the hand-fabrication of wax patterns. This booklet, explaining the ancient art of lost wax casting, has been revised several times and is now entitled Lost Wax – Casting with Kerr. It has been translated into many languages, and is a popular instructional aid among teachers and craftsmen throughout the world.

Satin Cast Regular Investment was formulated and introduced in 1951 to serve the casting jewelry manufacturer further. This investment better met the precise requirements of the casting jeweler, and is still one of the most popular jewelry investments throughout the U. S., Europe and in many Middle East and Far East countries.

Kerr continued to expand and improve its jewelry investment line. Satin Cast 20 was introduced in 1969, followed by Supervest 20, BrilCast 20, T-65 (for sculpture investing) and Platinite. Of these, BrilCast 20 was especially formulated with carbon additives to minimize oxidation on the casting. Platinite was developed for the casting of high melting temperature platinum.

In 1965, Kerr became a division of Sybron Corp., Rochester, N. Y. The firm subsequently moved its entire operation to Romulus, MI. Kerr presently maintains a factory of 200,000 sq. ft. on 33 acres of land near Detroit's Metropolitan Airport. Included in this facility are seven shipping and receiving docks to accommodate the largest-sized truck trailers. Being situated on a railroad siding permits Kerr to ship investment materials and supplies by rail car also.

As a pioneer in the manufacturing of lost wax casting investments, equipment waxes and supplies, Kerr has striven to produce the highest quality casting materials available. It is probably for this reason that many jewelry casters consider Kerr as a standard of excellence throughout the world.

VARIATION ON A BOX CLASP

by Vittoria Cozzi-Olivetti

The search for a solution to clasping a series of bracelets led me to one interesting enough for me to decide to share it.

I wanted a strong clasp, both visually and structurally, with clearly defined planes in keeping with the design of the bracelets. However, I could not use a closed box clasp since I wanted the ends of the bracelets to emerge from the clasp so that the latter would be a continuation of them and not an interruption. After quite a time of trial and error, this is the one I decided to use. (Fig. 1)

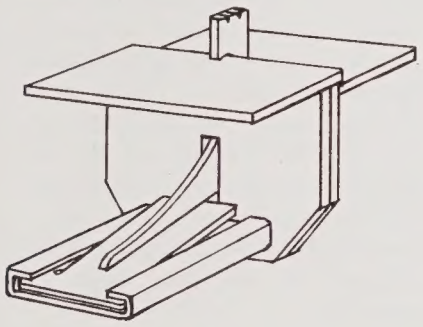


Fig. 1

The clasp consists of the following elements: Top A, Top B, Wall A', Wall B', Spring, Spring Housing, Push Button.

Saw two rectangles for tops A and B. They must be the same width (in my clasp about 15 mm), but the length of each may vary depending on the design. In my clasp they are the same length (about 10 mm). (Fig. 2)

Saw two rectangles for walls A' and E'. They must be exactly the same size, and their width must be the same as that of the tops. Saw off the two lower corners of these walls. This is not a functional requirement, but I found that it lightens the structure and gives it a more finished and detailed look. (Fig. 3)

Saw a rectangle for the spring. The width should be the same as the bottom width of walls A' and B', and the length, ideally, should be 1½ times the width. (Fig. 4)

The spring housing and push button will be described later.

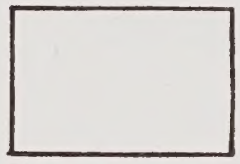


Fig. 2 – A

Fig. 2 – B

Fig. 3 – A'

Fig. 3 – B'

Fig. 4

Fabricating the Spring

With a small planishing hammer, hammer out the spring piece leaving, at one end, about 3 mm unhammered. (Fig. 5) The spring should not be hammered too thin, just a little, mostly to gain tension.

Trim about 1 mm off each side leaving the unhammered end intact, forming a small "ledge" on either side. (Fig. 6)

Drill two holes (No. 60 drill bit) towards the corners of the hammered end to determine the width of the tongue. Score the rectangle (minus bottom side) shaped outline of the tongue on the spring. (Fig. 7) The tongue should be as wide as is structurally possible. The distance between the end of the tongue and the thicker "ledge" of the spring must be equal to the combined thickness of walls A' and B'.

Saw along the outline producing a three-sided cut through the spring.

CA. 3 MM

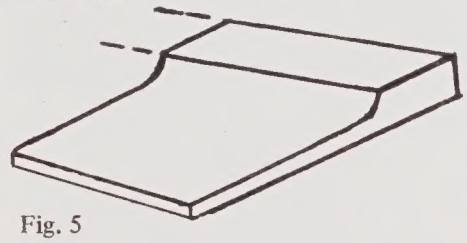


Fig. 5

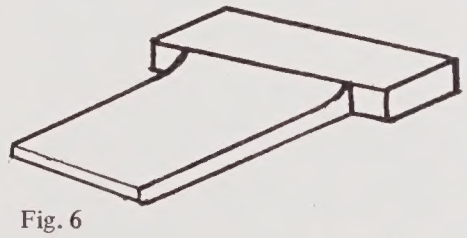


Fig. 6

Thickness of A' + B'

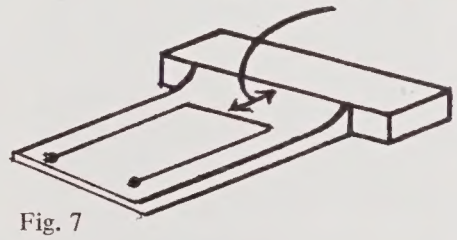


Fig. 7

Push Button

Saw out the push button. (Fig. 8) Its height should be about the height of walls A' and B'. Its length should be about the length of the hammered portion of the spring.

Fig. 8

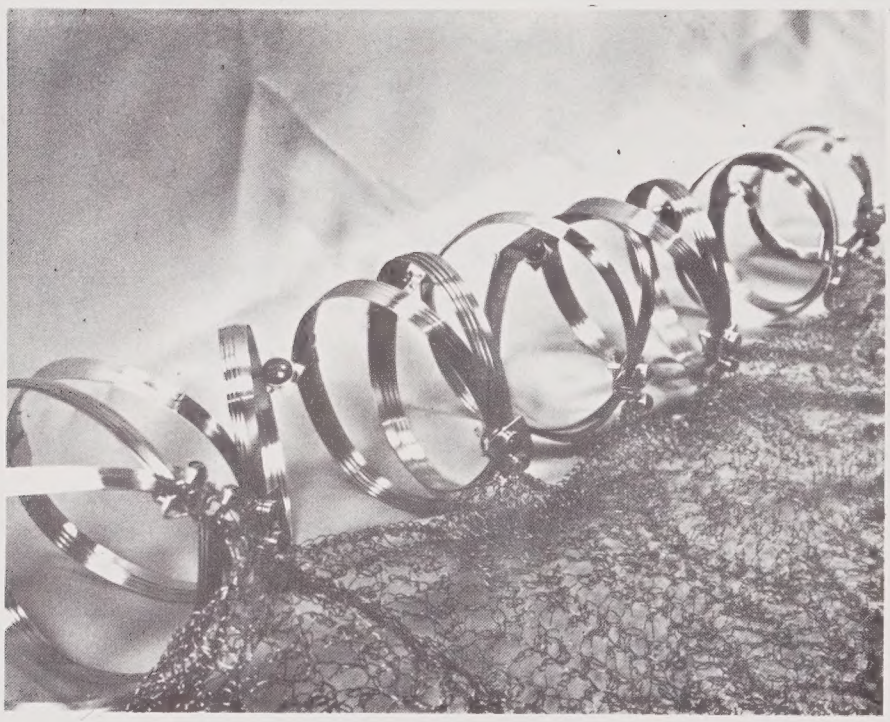
Assembling Unit A – A'

Mark and score (do not saw it yet) the location of a horizontal slit near the bottom of wall A'. The width of the slit should be equal to the width of the hammered, trimmed part of the spring. The distance of the slit from the base of wall A' is equal to the thickness of the metal used plus a fraction of a mm. Drill a hole (No. 60 drill bit) at the center of, and just resting on, this scored slit. (Fig. 9)

Solder top A flush to wall A' (hard solder). (Fig. 10) Note top A does not rest on top of wall A' but abuts to it. Top A must be absolutely perpendicular to wall A'; otherwise, the clasp will not work.

Saw out the scored horizontal slit making it barely high enough for the hammered, trimmed part of the spring to pass through. (Fig. 10) The spring must fit very snugly; if it has to be forced a little to go through, so much the better.

Saw out a narrow slit in top A, centered on edge A–A', to accommodate the head of the push button (a fraction wider than the thickness of the material used for the push button). Continue this cut ("turn the corner") down the vertical surface of A' to a point about 1 mm above the horizontal slit. (Fig. 11)



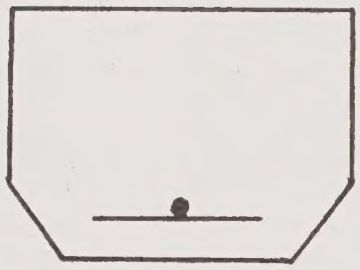


Fig. 9

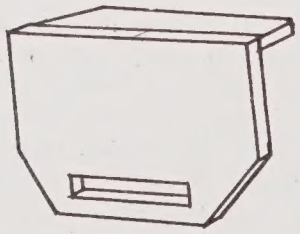


Fig. 10

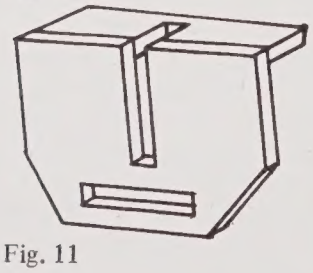


Fig. 11

Assembling Unit B – B'

Place wall B' face to face with wall A' so they align exactly. With a scriber trace the bottom edge of the horizontal slit opening in A' onto the surface of B' thus marking the position of a corresponding slit in B'. Drill a hole (No. 60 drill bit) at the center of, and just resting on, the scored slit. (Fig. 12)

Score a vertical slit centered in this horizontal one and extending about half way up the face of wall B' to form an inverted "T". (Fig. 12)

Solder top B to wall B' having the top slightly cantilevered (about 1 mm) beyond the wall (hard solder). (Fig. 13)

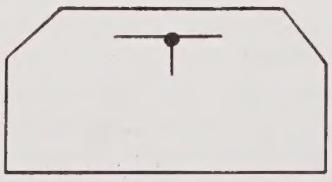


Fig. 12

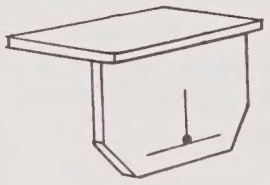


Fig. 13

Spring Housing

Saw a rectangle for the spring housing. The length of the housing must be the length of the spring minus the "ledge" and the combined thickness of walls A' and B'. The width should be about 1½ times the width of the horizontal slit marked in wall B'. Score the width of this slit down the center of the housing. (Fig. 14) With a small planishing hammer and glancing strokes from the scored lines outward, thin out two "wings" (but not too thin to be weak). With a triangular file deepen the scored lines. Trim off and true the housing into a neat rectangle.

Bend the "wings" upward to form a right angle then in toward the center. Flatten them slightly with a mallet. (Fig. 15)

Fig. 14

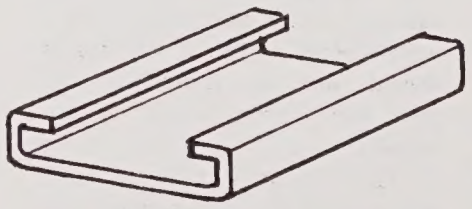


Fig. 15

Assembling the Spring Housing to Unit B – B'

Solder the spring housing to unit B – B' (medium solder). (Fig. 16) I never used a third hand. I make sure that the spring housing can stand vertically by itself. This insures perfect contact for a strong soldered joint.

The hole drilled in wall B' must be flush with, and centered on, the inner edge of the housing. Thus the housing is not flush with the bottom edge of wall B' but a fraction of a mm above it.

Saw out the ⊥ shaped slit. (Fig. 17) The height of the horizontal portion should be about the thickness of the spring before hammering, that is, greater than the horizontal slit in wall A'. The vertical portion of the slit must be wide enough to accommodate the push button. This ⊥ opening will most likely have to be adjusted in the final stage of assembly.

The reason I saw the slits after the soldering is for greater accuracy and to avoid possible distortion, during the soldering, caused by too much weakening of the piece if the slits were already cut out. Use as thin a saw blade as material allows (6/0 if material is thinner than 1 mm).

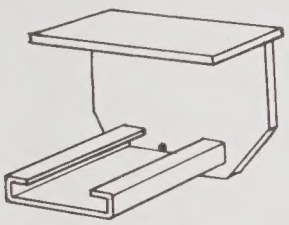


Fig. 16

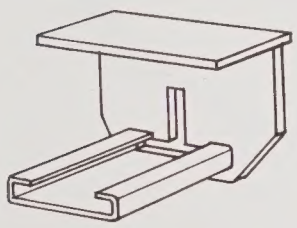


Fig. 17

Assembling the Spring to Unit A – A'

Push the spring through the horizontal slit in wall A' so that the "ledge" rests against the back of the wall. Make sure the spring is absolutely parallel to top A and, consequently, perpendicular to wall A'. (Fig. 18)

Solder the spring in place running medium solder along the joint of the "ledge" and the back of the wall.

Solder the push button on top of the tongue of the spring (easy solder) so that its foot rests slightly behind the two holes in the spring and its head rests in the slit of A – A'. When soldering the push button, lift the tongue slightly (about 1 mm) from the spring, keeping it raised with bits of wet asbestos. (Fig. 19)

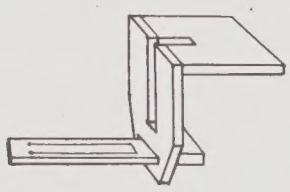


Fig. 18

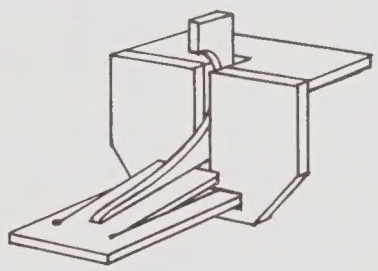


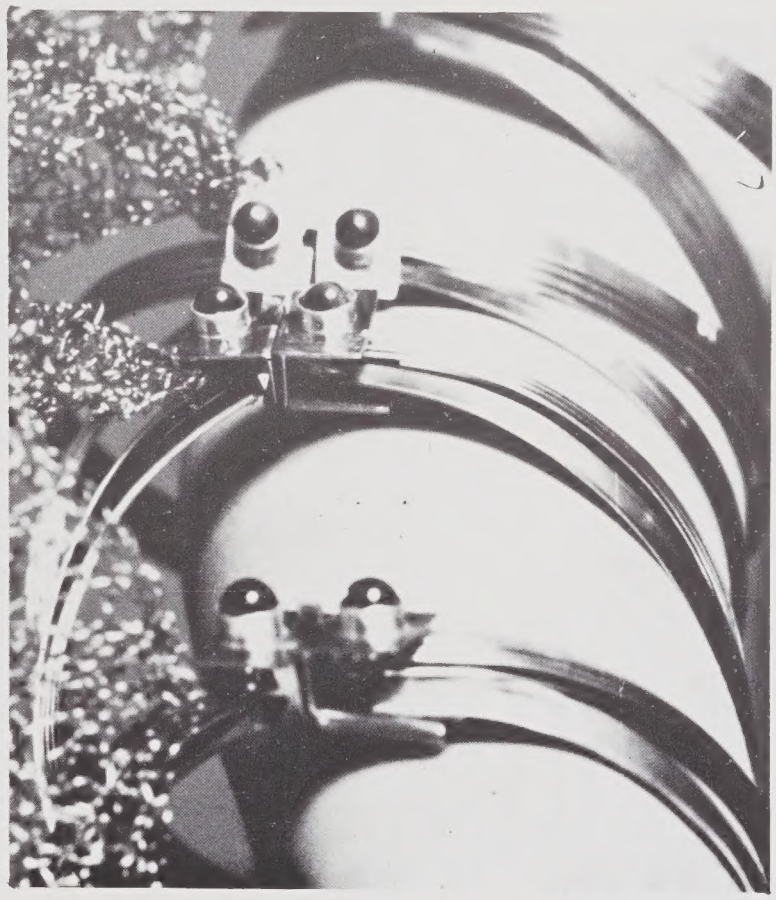
Fig. 19

The two parts of the clasp are now complete. However, as suggested above, some adjustment of the ⊥ shaped slit in B' may be necessary. The horizontal portion must be high enough to accommodate the rise of the tongue; otherwise the clasp will "lock" shut when closed, and simply depressing the push button will not be sufficient to open it. Also, the vertical portion must be tall enough to accommodate the push button when the clasp is closed.

Springing the Spring

With a small planishing hammer very slightly and carefully planish the tip of the spring (just in front of the foot of the push button) to increase tension. Round off the corners of the spring.

Holding top A grip only the tip of the spring with a pair of half-round pliers, and bend the spring several times upward and downward until the desired degree of springiness is achieved. With a 2/0 saw blade score two grooves on the top of the push button for the thumbnail grip.

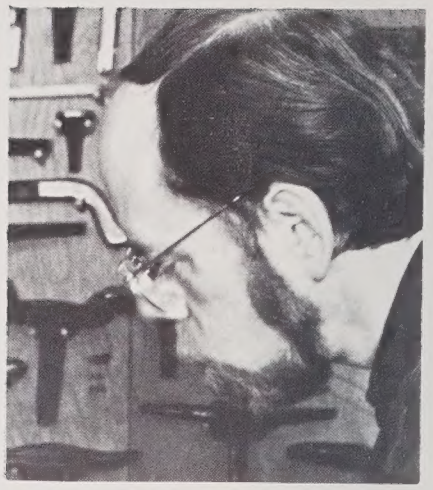


Vittoria Cozzi-Olivetti, detail of armlets

This clasp works extremely well in gold. When using sterling silver (1 mm gauge) I use either pre-hardened sterling or German silver for the spring.

The two main advantages I find over the closed box clasp, besides the abovementioned requirement of being able to house also the end of the bracelet, are: The tongue being sawed out of, instead of bent over, the spring avoids the (at least for me) very painstaking process of trimming off the sides of the tongue after it is bent, as in regular box clasps. The spring, being soldered through the slit in wall A', is much more resilient during the springing process than one merely soldered to the wall, as in all the box clasps I have seen so far.

NOTE: In the illustrations the thickness of metal and slit openings is exaggerated for clarity.



AUTOBIOGRAPHY

by Jay H. Adams

Writing an autobiography really puts me on the spot. In attempting to make some sense out of my life, I realize there were many years that could have been used in a more positive way. As a matter of fact, I'm thinking that now I should be working with metal instead of paper.

At 41, I have a secure position at Southwest Missouri State University in Springfield, MO. My duties cover all levels of jewelry/metal instruction. Teaching at the college level allows me time to balance teaching with creative production and family life. With my wife and three daughters, I enjoy city life, the beauty of the Ozarks, trout fishing at nearby lakes and the freedom to create in my own way.

I was taught that if you were persistent and put all you had into something, then it was possible . . .

I spent most of my 'growing up' years in Bloomington/Normal, IL – an average-size community with two notable universities. Living at the edge of town, I had the pleasure of many available friends, yet was still in walking distance of orchards and grain fields. I could sit under a tree in the warm sun and daydream about the great things I would do with my life.

My nearly ideal upbringing in mid-America was due to the 'times' and balanced influence of my parents, with the latter being more important. My mother graduated from college with a degree in music and my father with a degree in agriculture. This unique combination fulfilled my developmental needs. My mother's daily discipline, appreciation of the arts, optimism, and constant encouragement was enhanced by my father's love of people and the great joy he found in his work, nature and family.

My father's farm management business introduced me to nature, machinery and hard work. The 10 to 12-hour workdays, nights spent 'babysitting' a corn dryer, hot and dusty corn fields seen from a tractor, and country meals that you wouldn't believe all contribute to fond memories and a foundation for understanding what it takes to reach a goal. In addition, my father's business required every sort of tool for every sort of job. Under his instruction, I learned the proper use and care of tools at an early age and had the opportunity to build and construct many different projects.

My parents instilled in me the determination to reach my goals in life. Looking back, there were many barriers that had to be knocked down by repeated blows. I was taught that if you were persistent and put all you had into something, then it was possible – and that if a job is worth doing, it is worth doing right or not at all. I feel that this background is perfect for a metalsmith, since metal is resistant and needs a firm and skillful hand to transform it into a thing of beauty.

I learned much between schools as well as in them. After completing high school I worked in a local machine shop. Doing the same job over and over (jobs that anyone could do) was enough to lead me to a junior college. I majored in business and found it to be as unsatisfying as the machine shop. I changed my major to art with an emphasis in painting, sculpture, and commercial art and, after graduation from Illinois Wesleyan University, I attempted to find a job in commercial art. I discovered commercial artists with 10 years' experience were looking for jobs then and realized I should move in a different direction. I decided to earn a teaching certificate and enrolled at Illinois State University at Normal. Along with the education courses I was required to take jewelry and ceramics – and these developed into major areas of interest for me. After two years of teaching in public schools, I returned to ISU to pursue a master's degree in jewelry with the hope of teaching at the college level.

Studying under Ed Niemi, one

I like to think that something I have made will endure and be appreciated by those to come.

top: Jay Adams, wine server with cups, silver

left: Jay Adams, "Out of Orbit," container, silver & mokume, 4" dia.

of the original SNAG members, was a challenge. His instruction demanded excellence in design and craftsmanship and stressed the need to explore as many different techniques in metal as possible. This provided me with a broad base of knowledge that has been invaluable in college level instruction. I gained additional experience with a part-time teaching job at ISU while working on extra hours beyond my M. S.

In 1969, I was hired by SMSU to re-establish their metals program and also teach ceramics. After a few years the demand for metals classes allowed me to drop other subjects and teach only jewelry/metals.

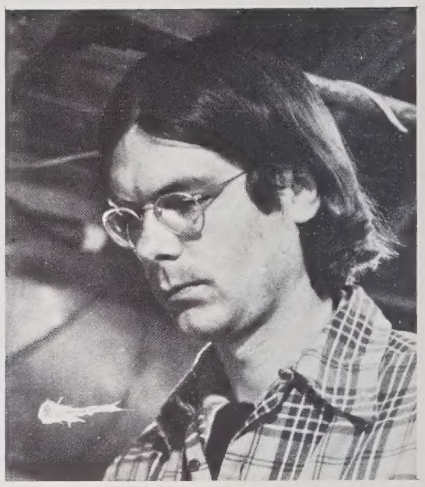
Teaching is an important part of my creative life. I encourage my students to develop their own sense of design and approach metal in a contemporary way. Never wishing to push my own design concepts on students, I rarely exhibit my work to classes. I would feel that I had failed as a teacher if my students' work appeared like my own.

My own work has been a steady stream of investigation – a reaching for new designs. I have worked in all of the non-ferrous metals and have created a wide variety of forms, from jewelry to containers. I do some commission work as well as following my own interests.

I have been working on pewter vessels for over 10 years and this is my main non-commissioned production interest at this time. Pewter is comparatively inexpensive, allowing me more freedom to work with large volumes which gives me a greater sense of satisfaction. I see pewter as having unique properties, as yet undeveloped, that I wish to explore.

Jewelry and metals have so many possible technical directions. The metal itself is nearly indestructible, resistant and it demands specific knowledge and skill. A well-designed and constructed product can outlive the artist and cause future generations to ponder its creation. I like to think that something I have made will endure and be appreciated by those to come.

Jay Adams, container, silver & mokume, 6"h'



AUTOBIOGRAPHY

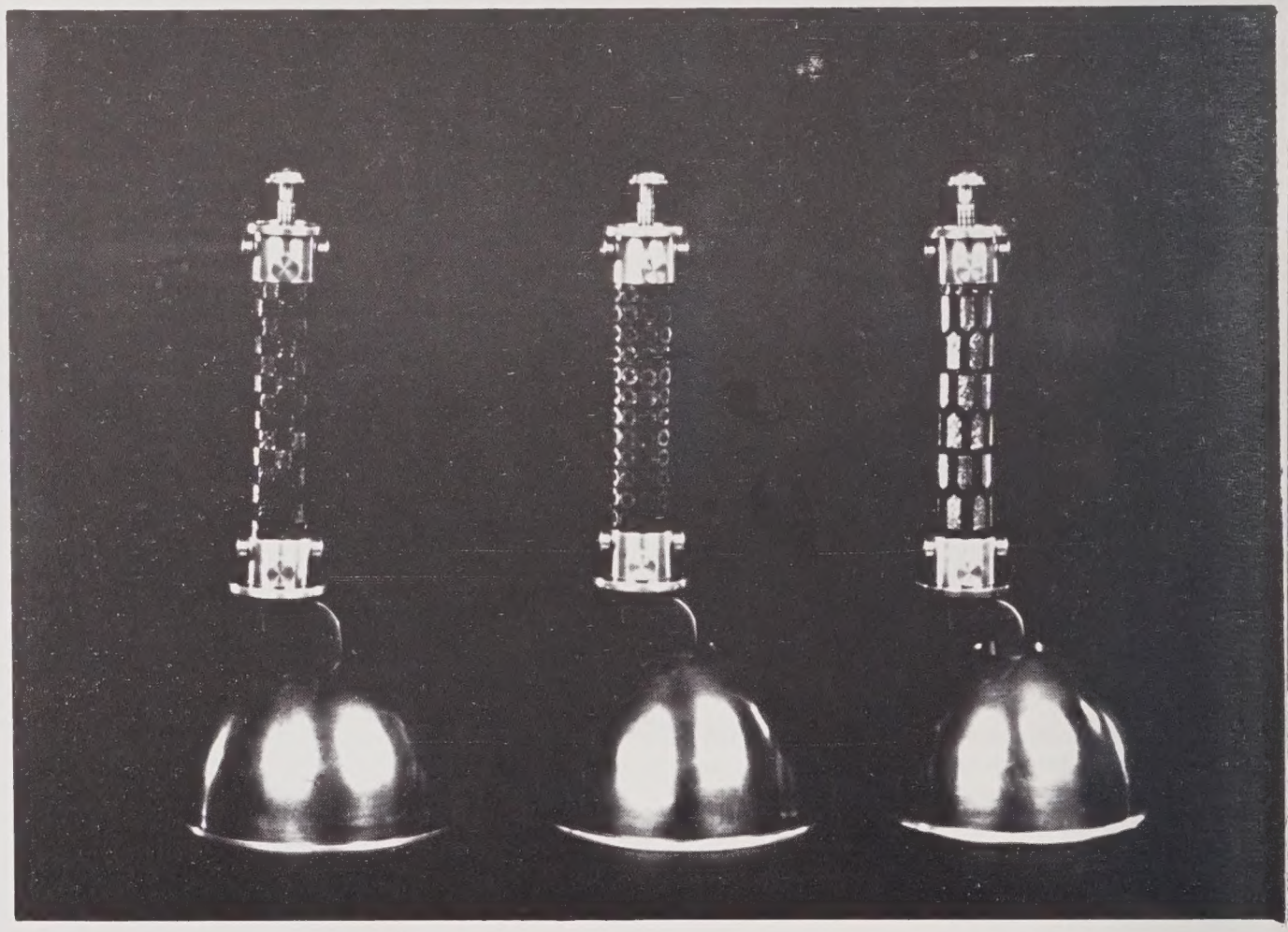
by James W. Malenda

I would like to say that it was an Immaculate Conception; however, I have been told differently, It was a difficult birth. I was born prematurely and quite small. Since there were no incubators available they placed me in the nearest enameling kiln at 1500 degrees F until I reached maturity.

The year was 1967 when I was finally released at the age of 21. To slow down the cooling process, I wound up in Miami, FL, as a student at Miami Dade Community College. It was usually a pretty dismal place except for the presence of Duane Hanson. He was probably the first artist I could relate to. However, he did have his moments when he spoke pseudo-Spanish and I could not understand a word he said. The strongest visual impression I was left with in those two years was when I visited his studio and saw a series of his figures arranged in a fantastically mundane setting. I valued this experience more than any we shared in the classroom.

After the cooling process was completed, I was placed in upstate NY in the city of Binghamton where I spent the next six months living with my parents and doing large masonite and canvas constructions and paintings. From there the move originally was "California or Bust," but I ended up at Kent State University, OH, instead. Going through all the requirements, prerequisites, electives, etc., as all undergraduates must do, I came to the realization I needed a number of "craft" requirements necessary to complete my degree.

"I see a direct correlation between the sail shape, which is constantly changing as it billows in the wind, and my pieces which change at every angle."



James Malenda, "Passion Cups," copper, silver, enamel, 10"h

Being closed out of all other craft courses except enameling, I had no choice but to take it even though I was fearful of having to make kitchen hotplates. But, having been sustained by the kiln for 21 years, I knew there had to be more to it than that. It was at Kent I received a good foundation in enameling, but took no jewelry or silversmithing courses whatsoever. At this time I was not excited at what I had seen in contemporary jewelry and metalsmithing.

After graduation, I headed for Asbury Park, NJ, but once again found myself back in Binghamton, this time working as an in-house lick and stick graphic designer for the IBM Corporation. The work was not very stimulating so with my first paycheck I purchased a kiln and stock of enamels. My small studio was the only redeeming factor of the situation. The job was so unchallenging that I put all my energies into my "own" work.

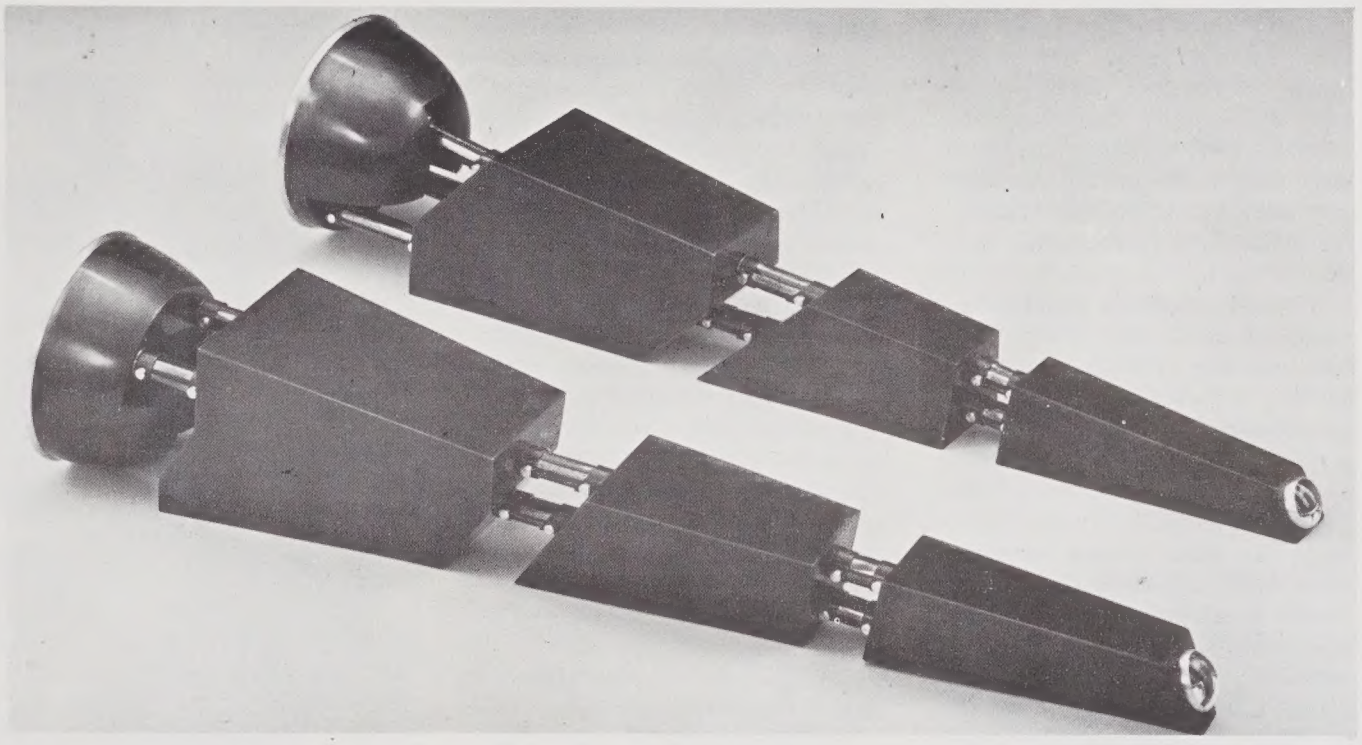
After a year of hibernation, I got out of the city and headed east for the State University at New Platz. I embarked on a course of study which no one had pursued at this point in time - intermediate design. My intent was to combine printmaking with enameling. After many long letters of petition, I was advised to pursue these intentions in either printmaking or gold and silversmithing. After long hours of consultation and many hours of deliberation, I decided to go for the gold. But, I ended up with copper. The color and feel of the metal was more important to me than its' preciousness.

The studio situation was more highpowered and stimulating than anything I had ever experienced before. I began to realize the potential of three-dimensional form in metal and started combining these forms with my enamels.

Three days after graduation, I found myself on a commuter flight

"The true expression of three-dimensional form is a work that can stand and support itself in any way the viewer chooses to place it . . ."

James Malenda, "Sail Form Vessell," silver, gold, enamel, ivory, 14"l



James Malenda, "Passion Forms," copper, silver, enamel, 24" l

on Cochise Airlines – flying to the Southwest with a terminal case of athlete's foot. I wound up in the middle of the Mohave Desert trying to convert pseudo-Indian silver and turquoise advocates to the dogma of working forms in all metals and precious stones. The conversion was impossible, but some personal growth developed out of the situation. Because of my isolation, I was able to devote a great deal of time to my own work and development. To my surprise, some of the forms I had been working with prior to my arrival to the Southwest were similar to the architecture, landscape and terracing of this area. The most remarkable structure was the Hoover Dam – a massive form separating Arizona and Nevada along the Colorado River. The stark white concrete barrier holding back Lake Mead, with high tension towers dancing along the hillside and smaller towers, set in the water looking like tiny ivory carvings, was reminiscent of a DeChirico painting.

At this time I began investigating the cup form. The pieces were raised, planished and polished, cut into, with certain sections eliminated and other sections added. Not only were these pieces a reaction to my environment, but also an expression of a personal statement about cyclical events.

From my first week in the Southwest, I tried to move eastward. Eventually, I arrived in Peoria, IL, where I have been teaching metalsmithing and design at Bradley University for the past two and one-half years. While here, I've continued to work on the cup form with the introduction of enamel on tubular forms. Along with this has evolved the development of the "passion cup" (a cup which cannot be placed down until its contents have been completely drunk). I got into this series because I was tired of the conventional cup or chalice (that which consists of the formula: cup, stem and base), and decided to allow the cup to exist strictly by itself, completely void of any anchor or base. The true expression of three dimensional form is a work that can stand and support itself in any way the viewer chooses to place it, and this is what I am doing with metal.

Still influencing my forms and intended future pieces are the Sydney Opera House by Jorn Utzon and sail forms, which in essence are one and the same. I see a direct correlation between the sail shape, which is constantly changing as it billows in the wind, and my pieces which change at every angle. They can survive both aesthetically and functionally whether they are placed on a level plane or suspended in air.

Within the past year my colors have changed drastically after having seen the German Expressionist exhibit at the Museum of Contemporary Art, Chicago. The color has gotten bolder and more dramatic. All the different metals and enamels in each piece must work as a unit. I will only use a certain type of metal for its color characteristics and not for its workability or preciousness. I will go any size or use any material to achieve the form I am after.

Right now, I am in the process of stoning and do not foresee any final flash-firing.

Natalie Paul, "The Circular Hand Painting," wall piece, sterling, copper, glass, colored pencil, watercolor, 6" dia., 1978

AUTOBIOGRAPHY

by Natalie Paul

Merry Christmas in Italian is Buon Natale, hence the name Natalie. I was born on the north side of Chicago, December 25, 1949. I lived in Roselle, IL, for a brief period before I was four and then moved to Park Ridge, IL, where my parents still reside today.

From a hereditary standpoint, every person in some ten to fifteen ancestors of mine were very average. However, one of my great-grandfathers, Ectore Pomo, was a clarinet player for Philip Sousa for many years and the other great-grandfather was a blacksmith (as most farmers were in those days). I attribute my nimble fingers to both these gentlemen. My mother's family, with few exceptions, is oriented towards the musical profession and most all my father's relations are involved with some aspect of the commercial printing trade.

My first true encounter with myself as an artist was an event that occurred when I was three years old. I was sketching a profile portrait of my springer spaniel "Grumpy" and I realized it looked more like my Dad's old '31 Chevy – oh, what a sense of perception! Actually, from that point, I began to cultivate the idea of some day being an artist. I recall spending many long hours at my blackboard and also on paper, sketching and drawing. My friends and older sister would often tease me for not being concerned with the latest television issues. Of course, I only commenced to draw when the weather did not permit tree climbing, fort building, and Hide 'n' Seek.

At approximately nine years of age, I began to take figure skating lessons. By eleven, I was completely confused as to my life's ambitions. I could not decide whether to draw with my hands or my feet. Figure skating came very easy to me. Before my fifteenth birthday, I had performed in various ice shows in Chicago, including a few held at the Chicago Stadium. Although I desperately wanted to continue my career as a skater, my parents encouraged me to realize the financial burden and possible limited education which might be the resulting consequence in pursuit of a competitive gold medal. Considering an eight to ten hour devotion on ice a day, plus high school requirements and social pressures, I took their advice. I devoted my time to school and spent most of my summers in art classes, continuing to explore my talents in the visual arts. My ice skates went to the closet and I turned to modern dance as a hobby to stay involved in a discipline concerned with body movement.

As the final year of high school neared, I had received a couple of local high school awards for my work in drawing and watercolor. With these encouragements, I began my baccalaureate studies directly after graduation as an art student at Western Illinois University in Macomb, IL. I focused my energies in painting and drawing up to my junior year when I selected metal/jewelry class as an elective. I had no previous experience with any precious or semi-precious metals, but felt an immediate identification with the medium. Studying under Steve Albair was inspirational! He offered a great deal of aesthetic criticism and his energy and efforts insisted on exposing his students to many metalsmithing and jewelry activities. For instance, as a group we went to SNAG '69 in Minneapolis-St. Paul. We were among some of the first students to attend a Goldsmiths Conference. We also readily discussed concepts in class critiques in conjunction with concerns for utilitarian objects and craftsmanship. After completing two

courses with Steve in metal, I received an award in the annual WIU Student Art Show and was selected to participate in several regional and national juried crafts exhibitions. I also received a Talent Grant in Three Dimensional Metal from the Art Department to conclude my degree requirements at Western Illinois. By this time my father had endured two severe heart attacks – so, the financial support from the institution was most appreciated by both my family and self.

I did not intentionally put drawing and painting aside for metal, but continued in these two areas. My production time and enthusiasm, however, slowly grew toward the alluring metalic surfaces. I entered Cranbrook Academy of Art as an M. F. A. candidate in 1972, after an intensive search to locate the graduate school which could offer me the most challenge and opportunity. I selected Cranbrook because of the freedom and intensity the environment encouraged. My two years there were all I had hoped the experience would be, and more. It was one of the most extraordinary learning experiences of my life. I participated in two departments while at Cranbrook: a major in metalsmithing under Richard Thomas, and a minor in drawing and painting with George Ortman. It was during these two years, working within the two departments, that I began formulating my own beliefs and opinions concerning metal. We occasionally had invitational group critiques in the painting studio.

These critiques sometimes involved 20 to 30 students. Di-

"My pieces I regard as most successful are those where technically I am no longer prospecting, but am in control of the media, moving with it."

Natalie Paul, "Hoatzin," hand painting – wall piece, copper, glass, feathers, pencil, 7", 1978

rected by Mr. Ortman, we criticized each other's work and frequently hashed over concepts, ideals and abstractions we had been conditioned to believe as artists – as artists in specific media and as an audience or viewer of these visual creations. These discussions prompted me to question the contemporary role of the metalsmith/jeweler, their many parallels to sculpture and painting, their historical and utilitarian concerns, their use of materials and technology, and the many prejudices they are confronted with in the art world. I did not anticipate ever totally resolving these inquiries. I wanted to sort out the development and role of an artist and an artist in metal/jewelry for myself, so that I would have some sense of where I was in this evolution.

I would like to believe my production capabilities are governed by the intent of my pieces whether I, the client, or the spacial environment set the restrictions. I am flexible depending on the task, the intent, and the projected outcome desired. I am concerned with technique as a means to an end, not just for sheer technical achievement. My efforts to gain skill in a specific technique may brow into pieces that are exhibition quality, but usually they become studies or samples to master the materials and tools involved. My pieces I regard as most successful are those where technically I am no longer prospecting, but am in control of the media, moving with it. My work is often spontaneous. I constantly use beeswax to assemble components. Before making the conclusive decision as to how these units might work best with each other, I interact them with one another, move them around, and connect them in place with the wax until I have achieved the image I see as most relevant to the vitality and intention of the piece. Although I can easily work from precise renderings, I prefer the more direct rapport with my materials. In addition to the many traditional processes identified in metal/jewelry, I have been primarily researching photoetching and other materials in a non-traditional combination with metal. However, I do not feel transition, change or growth if I am bound to a few techniques, processes or materials. If the technique or material lend themselves well to the imagery I am attempting to convey, then I use it.

Recently I have been dealing not only with functional body ornaments and utilitarian pieces, but also with interior wall spaces. These spaces might range from 12 to 24 inches in width. I am pursuing metalsmithing technology united with painting and ceramic techniques, as well as other materials. I have been producing wall pieces for this particular scale primarily because small walls are repeatedly overlooked or ignored as a source for visual stimulus in interior environments. I refer to my small wall pieces as "hand paintings," in much the same way as reference is made to a hand mirror. They demand an intimate exchange with the viewer. They are small enough to take off the wall (usual size approximately 8" x 5") and hold in your hand. Frequently, these pieces entice with secret chambers or compartments. The combination of scale, technology, and materials has enabled me to create a three-dimensional wall form with an intimate concern for the environmental location and audience.

Since graduate school I have been teaching. As for most of us youngsters, landing the first job was to say the least a struggle. I began at Edinboro State College in Edinboro, PA, then taught two years at the University of Montana in Missoula and am presently at Northern Michigan University in Marquette. I view teaching as an enlightening and learning experience. How wonderful – getting paid to examine and explore the medium you enjoy with others involved. In every teaching position so far, I have been fortunate to have the department's support for either a visiting artist program or a major national or invitational show on campus. The healthiest teaching situation, I believe, is in a two or more person department. I encountered this briefly at Edinboro when I served as a sabbatical replacement for one of the metal instructors there. Working closely with Roger Armstrong and the others in the department made me aware of the many opinions and methods a student has at their finger tips in such a studio. When the area is working harmoniously, it is an enriching experience for all.

I offer my students numerous opportunities to assert themselves and become acquainted with the many facets of our medium. As an instructor, I try to encourage awareness of the aspects and movements in the art world, so they are familiar with the form, concepts, and materials used in a variety of areas. I further expect them to be knowledgeable of the historical and contemporary idealogy inherent to metal and jewelry. Being aware of the development and current attitudes of the visual arts will strengthen and generate the individual's own concern for form, imagery, and design, whether it be in a functional or non-functional reality.

I do not agree with many of the administrative actions of most institutions concerning funding and tenure, but I do enjoy teaching and put in a great deal of energy and time to facilitate my students' needs. I feel an obligation and dedication to the profession. Whether I stay in academia my entire career is not yet a concern of mine. For now it is a hard, but rewarding way to make a living. I have been fortunate – I have always felt a sense of direction or clarity of mind and goals. At times, I am frustrated by how long it takes to reach my expectations, but I do seem to get there.

In conclusion it might be interesting to note I am skating again. I have actually passed a couple more tests towards a non-competitive gold metal in ice dancing. I hope to keep up the physical activity as a therapeutic endeavor much as one might jog. Many aesthetic and technical problems are often solved in my work while exercising. I am convinced that maintaining physical activity will assist in keeping you intellectually alive. Skating is not something I care to pursue professionally anymore, but it certainly cleanses and revives the body and the brain!

FEATURE ARTICLES

THE COOPERATIVE APPROACH TO CRAFTS

by William R. Seymour
Farmer Cooperative Service

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More and more rural people have turned to craft programs as one tool for economic development. This approach has much merit because of the abundance of physical and human resources frequently available, often backed up by a cultural heritage in crafts.

This article is prepared in response to numerous requests by new and existing craft cooperatives for guidance in establishing and operating such cooperatives.

No definite figures are available on the number of craft producers or cooperatives in the United States. Farmer Cooperative Services has, however, recorded over 70 craft groups serving over 5,000 craft producers in the Appalachian Region. It has assisted these and several groups elsewhere in the United States – the latter stretching from the northern part of Maine to New Mexico and up to the outer islands of Alaska.

The Office of Economic Opportunity has funded and given technical assistance to over 40 handcraft cooperatives at the latest count. Thus, interest seems to be widespread.

Most craft cooperatives formed during the past few years have been supported by Government financing. A few are now showing signs of potential for becoming economically self-sufficient. Most, however, still need additional operating and technical assistance.

Experience of those working in craft development shows a growing market for crafts in our society. Many practicing craftsmen have no trouble earning a living from the sale of their crafts.

The following statement comes from an instructor and craftsman: "People are grabbing up anything that people have touched. They seem anxious to buy anything that was made with human hands. Craftsmen every day find out that they can make enough to buy groceries and have a comfortable life."

Yet, many craft producers have not been able to achieve their expected income projections because of lack of training, poor quality control, poor design, the absence of a good market, and/or poor business practices.

Many have turned for help to the cooperative form of organization. Though most rural people are familiar with the cooperative approach, developing and operating their own craft enterprises is a new and unfamiliar undertaking to most. Whatever the nature of the craft enterprises, they must be handled in an efficient, businesslike manner for economic success.

HOW CRAFT COOPERATIVES OPERATE – The principles that distinguish cooperatives from other types of businesses, the services that craft cooperatives perform, and members role in cooperative management are now discussed.
** Three Co-Op Principles – The same principles and practices apply to craft cooperatives that apply to other types of cooperatives. Cooperatives have long been used in rural areas to market farm products, obtain supplies, and provide many services such as electricity, credit, insurance, and irrigation.

Three fundamental principles distinguish cooperatives from other types of businesses:

Service at cost is basic. This means that the cooperative does not make money for itself. Net margins above the cost of providing services belong to members of the cooperative in proportion to their patronage, resource contribution, labor, or according to some other predetermined basis for allocation.

Democratic control means the association is controlled on some basis other than the amount of capital contributed. Generally, this basis for control is one member-one vote.

Limited return on equity capital means that the return on capital invested in the cooperative is not the principal benefit sought by members as is the case with stockholders in a non-cooperative corporation.
** Three Types of Service – Craft cooperatives can be classified according to the services they perform: Marketing, supply, and technical assistance.

Though most craft cooperatives start out primarily as marketing cooperatives, they usually expand into selling craft supplies and acquiring or supplying technical assistance to their members.

Marketing – Once a craft is produced, a decision must be made how it is to be marketed. There are two basic kinds of sales:

1. Wholesale – crafts are sold to a large volume jobber, gift shops, specialty shops, interior decorators, national and State park stores, or to another cooperative that in turn sells to the consumer.
2. Retail – crafts are sold directly to the consumer by various ways. Some are: mail order (catalog), roadside stores, exhibits and fairs, or home showrooms.

In the past, the great bulk of crafts has been sold to tourists by individuals personally or through local outlets such as roadside stands, stores, exhibits, and fairs. To a certain extent, this has been because tourists were the only market available to the producer.

With the expanding supply of crafts and retail outlets, the individual producer has found it more difficult to make sales. A marketing cooperative is important because of its potential to develop a broad geographic market for the producer as well as to attract buyers by offering a variety of crafts in sufficient quantities.

Often members sign a marketing or membership agreement in which they contract to market a portion or all of their crafts through their cooperative. The cooperative then contracts to receive and market all of the products specified in the agreement.

For many the wholesale market holds the greatest hope for continuing expansion of sales. This market is looking for larger quantities of quality products than the individual producer can supply. In some instances larger quantities are needed than one association can supply. Thus, several associations are combining efforts to meet this demand.

A marketing approach should be determined before a cooperative is formally set up.

Supply – Craft producers characteristically have sold their output at wholesale prices while paying retail prices for many of their supplies. Because they purchase relatively small amounts, they often must pay extra for products such as paint, yarn, fabric, and tools. Also the quality of raw materials is not always consistent from purchase to purchase.

To overcome these problems, many craft producers turn to cooperatives, especially those living in isolated areas.

Major objectives of a supply craft cooperative are: (1) to save costs for member-patrons through quantity purchasing, and (2) to procure the type and quality of craft supplies best suited for members' needs.

Technical Assistance – Supplying technical assistance to members is not unique to craft cooperatives, but is more needed than in other type business ventures. Because crafts are handmade and an individual expression, initial and continuous training along with design flexibility is often needed.

The individual craft producer has found it hard to get training and new design aid to meet the changing market. Many craft producers have thus organized into cooperatives to get training, quality control, and design help they have been unable to acquire individually.

The marketing potential of the cooperative cannot be developed to its fullest unless the producer is properly trained and uses raw materials that will yield a uniform quality product.

The producer is not able to meet his obligation to supply the cooperative with crafts if the needed materials are not available and he has not received proper instructions on what the market wants.

Thus, it is clear that all three functions – marketing, supplies, and technical assistance – must be planned and coordinated if the cooperative is to serve its markets properly and gain the maximum economic return for its member-patrons.

** Member Control – The management of a cooperative is a team approach made up of three parts: members, board of directors, and hired management.

Members of a cooperative have a role in management that differs from stockholders in other type business corporations. This is because they own and control the cooperative.

Members should be aware of the affairs of their cooperative and play a positive role in its management. Experience has shown that often members do not automatically assume their responsibilities. Board of directors and hired management are responsible for helping members understand their management role. They must find ways and furnish opportunities for members to express what they need from their cooperatives.

A cooperative is a democratically controlled form of business. However, members cannot make all decisions directly. In carrying out democratic control, members elect directors to represent them in many affairs of management. This right should not be taken lightly.

Generally, directors direct and supervise the operation of the cooperative in two ways.

One is by handling their duties directly as a board. Here they discuss, make decisions, set policies, and give instruction as a unit.

The other way is to delegate duties to executives of the cooperative – usually the manager – to carry on the day-to-day operations of the cooperative.

The board also has other responsibilities. It functions as trustee, determines general policies, preserves cooperative character, sets requirements for accounts and records, controls the total operation, and distributes corporate earnings. But the most important responsibility is to employ a competent manager. These areas are discussed later in the section on Managing.

WHY AND HOW CRAFT COOPERATIVES SUCCEED – While the cooperative approach does not assure success of any enterprise, it does provide a vehicle through which people can bring together the resources needed to overcome many problems.

For a craft cooperative to succeed, it must not only bring advantages to its members, but must operate in accordance with good business practices.

** Specific Advantages – Craftsmen find that working through a cooperative brings them specific advantages. These are:

1. Marketing Assistance – A cooperative usually hires a manger to take over the task of marketing products for the group. He is generally chosen because of business experience and training. He should know markets and what will sell. He is responsible for keeping records, making deliveries, and handling shipping.

The fact that he can devote full time to developing the craft business is a distinct advantage to the business. This then allows craftsmen to devote their efforts to production.

Craftsmen may sell their work to the cooperative under contract or consignment. The cooperative then finds markets. For example, cooperatives often contract with gift shops and other outlets when their members can produce in sufficient quantity to make this feasible.

The cooperative can help the producer determine a fair market price for his products. In some cases this means getting a higher price per unit while in other cases it means helping him place a sales price on his products that will not price a craft out of the market.

An experienced cooperative manager and pricing committee thus can insure a more profitable and stabilized market for member-producers.

Many large wholesale buyers, for reason of quantity and quality control, will not deal with an individual, but only with a consolidated supplier.

A cooperative can assemble a number of items and thus attract buyers who need larger quantities to carry in stock. For example, the manager of a North Carolina craft cooperative in 1970 negotiated a contract with a large thread manufacturer under which craftsmen make hand crafted sample items to be used in store displays of the company's products. This contract is expected to bring many thousands of dollars per year into the co-op. Craftsmen working on this project are being paid an hourly wage.

2. Lower Costs for Supplies – A cooperative, through group purchasing, can get raw materials for member-patrons at a lower price than by purchasing individually. A cooperative can purchase fabric, thread, and dacron or cotton filling for its quilters in quantity lots, as one example.

Members can also be assured of a constant supply of quality raw materials to work with. These services also save the craftsmen time and travel.

3. Technical Assistance – Training programs with skilled craftsmen as instructors help people improve and develop their products and learn what is marketable. Effective training programs are essential to the success of a craft cooperative.

Some of these programs have been set up with State or Federal assistance. In most cases, programs are not authorized to sponsor training for individual craft producers who are not assured a sustained market. The cooperative approach can fill this need.

It is not just enough to give initial training. The producing craftsmen must have assistance on a continuing basis.

As most craftsmen develop their skills in certain areas, problems develop in other areas of production and marketing. Such problems may occur in proper equipment selection, material selection, product design, and management.

Membership in a cooperative is more attractive if that organization provides technical assistance to members on a follow-up basis.

Many craftsmen in a Tennessee cooperative have been trained in a State-sponsored program. This cooperative now has more than 75 members and many of them depend on crafts for their total cash income.

4. Quality Control – A cooperative can establish quality controls and standards that create buyer confidence and promote

markets. Many craft cooperatives have standard committees that determine if a member's product is acceptable. If an item is rejected, the craftsman is told why and an effort made to help bring quality up to standards.

Craftsmen are encouraged to participate in craft exhibits and demonstrations as this brings them face-to-face with buyers. Hearing comments from "outsiders" favorable or unfavorable gives craftsmen a better understanding of what is marketable and of the quality the public demands.

5. More Efficient Business Operation – . A group can often get better financing than an individual craft producer. Often a cooperative can get loans or grants that would not be available to individuals. A $50,000 Farmers Home Administration Economic Opportunity loan helped a Kentucky cooperative build a crafts' sales building, for example.

Also, a cooperative can provide clerical services and the overall business management that craftsmen need. One employee can keep the records of supplies purchased and resold to members and of sales of members' products, maintain bank books, carry on necessary correspondence, and do general office duties.

6. New Products and Designs – A cooperative manager knowledgeable in the crafts field can help members develop new products and designs.

Usually members of a cooperative will make a few samples of a new product to see how the market responds. Sometimes a change in design will improve saleability.

For example, a Tennessee woodcarver, confined to a wheelchair, was getting a meager return for his work. With help and guidance from his cooperative he is now earning an adequate living for his family.

7. Joint Purchase and Use of Equipment – Certain equipment, such as some woodworking machinery, may be too expensive for individuals to buy. However, the cooperative can buy equipment for members to share, thus keeping both operating costs and initial investments low.

Cooperatives often can set up centrally located workshops where members can use co-op-owned equipment.

** Guidelines for Good Operations – Like the individual proprietorship, partnership, or corporation, a cooperative must operate on a businesslike basis if it is to succeed. This is a primary requirement. The cooperative approach to crafts does not automatically solve all problems or guarantee success. Competent management is the first requirement for good business operations.

Second, the human factor must be considered when an association is formed. The people joining together should have similar personal attitudes, and, most important, use a vigorous approach to their common goal.

Third, the organizational structure of a cooperative creates problems not encountered in individual operations. How economic benefits are to be distributed to members, how new members can join the cooperative, method and kind of management, and ways of terminating membership must all be spelled out before the cooperative is formed.

Fourth, a craft enterprise must be sure to locate proper markets and insure that members can produce crafts in the quality, quantity, and design that buyers demand.

HOW TO FORM A CRAFT COOPERATIVE – It takes only a few craft producers to spark the forming of a cooperative. Usually these producers are friends who have a common problem. If they think that group action can solve their mutual problems, then they may try to get others with similar interest involved.

At this point, they usually call on someone who is familiar with the cooperative-forming process to work with them in planning the cooperative, setting it up, and financing and managing it.

** Planning – A cooperative should be organized with considerable care to develop and operate a craft enterprise. A committee should be appointed by the potential members to explore possibilities and prepare reports for consideration of those interested in forming the cooperative.

Details for doing this are contained in Educational Circular 18, How to Start a Cooperative, published by Farmer Cooperative Service, USDA.

The first steps of the committee are to determine economic feasibility and objectives of the proposed cooperative.

Economic Feasibility – As a business enterprise, a cooperative is affected by the same economic forces and management practices that bring success or failure to other types of businesses. Some cooperatives fail because members do not understand this.

Before a craft cooperative is organized, someone – usually a committee composed of potential members – must determine if there is a need for the co-op's services. Volume of potential business must be adequate to support the organization. Adequate capital must be available to support the operations.

It may be useful to have a committee examine the present craft production in the area, estimate the potential production and what training and other technical assistance is needed – and then prepare a report for all those interested in forming or funding the cooperative.

One way of determining the need for a craft cooperative and its chances for success as a business enterprise is to develop a questionnaire and ask the potential members what they think and what they are now doing. A sample craft survey may be obtained by writing the Dept. of Agriculture.

After the survey is taken and the committee has analyzed the information, the following must be determined:

1. Are enough craftsmen already producing marketable crafts to justify an association? What level of skill are the craftsmen? If the survey does not indicate a nucleus of skilled people, it is better not to start a cooperative.
2. Are enough local people willing to join and support the enterprise?
3. Are there people in the area who can assist in training and give other technical assistance?
4. Are there people in the area who have management skills? Are they willing to help?
5. Can the local group furnish any part of the required capital?

If the membership questionnaire indicates a need for a marketing cooperative, and producing craftsmen are in the area, then a projected sales and expense statement for the craft association should be constructed.

In constructing the sales and expense statement, several questions will have to be answered. Some of these are:

1. Is there enough tourist and local business to support a retail shop? What other markets are there?
2. What portion of the craft production must be sold wholesale?
3. Is there an existing facility that can be leased for the outlet? Or will a facility have to

be constructed? Will these facilities attract the tourist business? Are they adequate for wholesale distribution?

4. Is there a person competent to run the cooperative? Where can one be found or trained? At what salary?
5. How much inventory will be needed? What is the estimated annual stock turnover?
6. How much additional training will be needed by members?
7. How much initial operating and technical assistance capital will be needed to run the business? Where will it come from?
8. How long will it take to make the cooperative self-sustaining? 2 years – 5 years?

Though many of these questions will be hard to answer, it will be necessary to have some general answers so sound decisions can be made and so potential members will not be misled.

If the area does not lend itself to a retail outlet, the committee should then determine what wholesale buyers now operating both within the area and elsewhere would be interested. It should also determine the potential in selling to them, and what facilities and personnel will be needed to operate a wholesale operation.

Co-op's Objectives – If the committee determines that the potential cooperative would have a nucleus of qualified craft producers and markets can be found, then the objectives for the new association must be spelled out. These should include:

1. What services will be provided – marketing, supplies, technical assistance, or a combination?
2. Who will be eligible to use the services – area to be covered, potential members?
3. What type of production facilities and equipment will be needed – in central workshop, home workshops, government facilities, or a combination?
4. How will products be marketed – on consignment, purchased from producers at time of delivery.
5. What margins will the cooperative charge – on wholesale sales, on retail sales, on consignment sales?

For example, if the object is to provide members with a marketing outlet with no auxiliary services, the members must be highly skilled and proficient producers.

If the members have only limited experience, technical assistance must be incorporated into the formation plan. If members have limited equipment and raw materials, then provisions must be made for this.

Experience has shown that for a handcraft business to develop to its fullest economic potential, production can often be done in cooperative shops where more equipment is available than individual homes, at least in the initial training period. This is because many craft producers are not skilled enough to meet quantity and quality demands of the market. The craft shop approach enables the cooperative to supply supervision to assist members in gaining maximum potential.

** Organizing – After it has been determined that a handcraft cooperative is feasible and the prospective members decide to organize, the next step should be to retain a lawyer. He will advise the group on the legal procedure for setting up a cooperative.

Details on organizing can be obtained from Educational Circular 18, How to Start A Cooperative, and FCS Information 66, Sample Legal Documents–Legal Phases of Farmer Cooperatives, published by Farmer Cooperative Service, USDA.

Incorporation – A corporation has authority to conduct business in its own name. Incorporation is the act by which the corporation is brought into being. Generally speaking, incorporation limits the liability of each member to the amount of capital he has agreed to supply.

Each state has one or more statutes under which corporations can be incorporated. Some have specific laws for non-agricultural cooperatives that the craft cooperative can incorporate under. In some cases, it may be more feasible to incorporate under the regular incorporation laws of the state and set up bylaws so as to operate as a cooperative.

Other groups may elect to incorporate in the District of Columbia under Publis Law No. 642-76th Congress, Chapter and then incorporate in their state as an out-of-state corporation.

These laws specify the type of information that must be included in the articles of incorporation and designate the official with whom the articles must be filed.

Adoption of Bylaws – After articles of incorporation are filed, it usually is in order for Charter Members to hold a meeting to adopt bylaws and elect directors. Examples of bylaws can be found in FCS Information 66, Sample Legal Documents – Legal Phases of Farmer Cooperatives.

The bylaws include discussions of membership rights and responsibilities of members, methods of calling and conducting meetings, voting rights and quorum, duties and qualifications of directors and officers, bonding requirements, date of association's fiscal year, determination and distribution of proceeds, and miscellaneous provisions.

First Meeting of the Board – The board of directors must be elected by the members and should hold a meeting immediately after adoption of the bylaws. Among business matters to be acted upon at this meeting are:

1. Election of officers as specified in the bylaws.
2. Authorization of president and secretary to have copies of the articles of incorporation and bylaws printed and distributed to members.
3. Selection of a depository bank; designation of officer or employees authorized to handle funds and issue checks; arrangements for bonding officers and employees in accordance with the bylaws; arrangement for bookkeeping and auditing; and transaction of any other business relating to such matters as insurance, financing, and the employment of a manager.

Farmer Cooperative Service has several publications written especially to help directors recognize and fulfill their responsibilities. Some of these are listed by specific reference within this text.

** Financing – The amount of capital a craft cooperative will need depends upon the size and type of its operation.

When the cooperative does not own and operate physical facilities but provides only a service such as advertising, promotion, accounting, or supply buying, operating funds usually can be provided by membership fees, dues, or assessments.

But more commonly, a handcraft cooperative will need to supply more services than this. Then additional sources of capital will be needed. If a training program is to be incorporated, grant money and aid will be needed.

Some cooperatives raise money by selling capital stock to members. In most cases, little of this stock ever goes to buyers outside the cooperative because investment in a cooperative does not offer the speculative growth possibilities found in some other types of in-

vestments. There have been instances, however, of non-members purchasing preferred stock or making investments for the community interest.

Most craft cooperatives, in recent years, have been financed through Federal programs. A good source of finding out what help is available is the Catalog of Federal Domestic Assistance compiled for the Executive Office of the President by the Office of Economic Opportunity. Copies of this publication can be found in most local Federal offices.

Other sources of financial assistance are churches and private foundations. Local banks can and have made loans to craft groups that have proven economic stability and feasibility.

** Managing – A cooperative, like any other type of business, must have competent management if it is to succeed. Someone must plan and direct the cooperative's activities; hire, train, and supervise employees; and handle day-to-day operations.

The degree of skill with which this is done will, in a large part, determine the success or failure of the cooperative.

As stated earlier, management of a cooperative is not a one-man responsibility. Members, directors, and hired personnel all have important roles. The responsibility of each group is specific and must not overlap.

Members – The first steps in providing for management are taken by members when they adopt bylaws and elect directors. Members of a cooperative have definite responsibilities to do business with it, invest in it, and support it in every way. It is important that they be informed about their cooperative.

Directors – The directors act as trustees for members. They establish policies and long-range objectives; decide on programs and courses of action; and, at least in a general way, direct and guide the activities of the cooperative. They approve budgets, review reports, and require outside audits.

The most urgent role directors play in management – and one of the most important – is hiring the manager.

Hired Management – The manager chosen by the directors is responsible for selecting his staff and organizing activities in a manner that will produce the results desired by the members and directors. The manager is responsible to the directors for the work effectiveness.

The manager selected to direct the operations of a craft cooperative should have some technical knowledge about the particular type of activities involved.

But that in itself is not enough. He also must be able to select, train, supervise, and direct employees. He should be equally adept at working with the board of directors in developing plans and programs that will carry out the policies and objectives of the cooperative.

The manager is a key employee and the success of the cooperative will depend to a large extent upon his ability. He should be selected with great care.

** Keeping Records – It is important for all businesses to keep good records. This is especially true of cooperatives since members must be fully informed of how their business is done. Hired management keeps most of the records, but the board of directors must insure that these records are accurate and meet the needs of the board and members. Some of the records needed are:

Budget – The budget is basically a profit and loss statement planned in advance by the manager for board approval. Its primary value is helping the co-op management plan sales and inventories and control expenses and profits for the coming year.

Cash Records – Accurate records and procedures are essential to good cooperative operations. A manager needs records that give him full and ready information on various aspects of the firm's financial condition. As a minimum, records should furnish answers to these questions:

1. How much cash was received and from whom? How much was spent and for what? How much cash is on hand and in the bank?
2. To whom has credit been granted? How much? What payments have been received and for which account? Which accounts are delinquent? Do these accounts violate credit policies?
3. What is the inventory? This should be kept by units and dollars for each item. What has been added? What has been removed? How much is in stock?
4. What are the fixed assets? What are the accounts payable? What are the capital or investments?

Answering these questions successfully is essential to good cooperative management. The job of keeping good financial records is vital. It is wise to get a local accounting firm to assist the bookkeeper in setting up records.

Then at least once a year an accredited accountant should do an audit. He then will prepare the financial statements the board needs and which are needed for tax purposes. Additional information on keeping records can be obtained from Farmer Cooperative Service.

** Taxes – Craft cooperatives are subject to the complete range of taxes that other businesses have to pay. Every business pays income taxes on that part of its net earnings paid out as dividends on shares. Every business pays income taxes on what it adds to its surplus reserve. No business pays income taxes on refunds to its patrons. Thus a cooperative must distribute earnings to member-patrons or pay income taxes on them. For more information see Internal Revenue Code of 1954, sections 1382(b) and 1388(a).

Good payroll records must be kept in order to collect and pay social security taxes, both the employees' and cooperative's share. The cooperative must send monthly payments to the Federal Government for employees' withholding taxes that are collected along with the cooperative's share of social security taxes if the combined amount is $100 or more.

Sales taxes collected from customers must be paid at least on quarterly basis or more frequently, depending on the state law.

The cooperative is also subject to State and Federal unemployment taxes.

AVAILABLE ASSISTANCE – If you are interested in organizing a craft cooperative, talk to your County Extension Agent. He can answer many questions and refer you to others who may be able to provide assistance.

Federal Government Agencies that may be able to assist are:

1. The Office of Economic Opportunity, Office of Technical Assistance, Washington, DC 20506
2. Economic Development Administration, Department of Commerce, Washington, DC 20230
3. National Collection of Fine Arts, Renwick Gallery; American Folklife Festival, Division of Performing Arts; and Museum of History and Technology, Cultural History Division,

Smithsonian Institution, Washington, DC 20506

4. Bureau of Indian Affairs, Indian Arts Crafts Board, and National Park Service, U. S. Department of the Interior, Washington, DC 20242
5. Federal Inter-Agency Craft Committee, National Endowment for the Arts, Washington, DC 20506
6. Farmer Cooperative Service, U. S. Department of Agriculture, Washington, DC 20250

** Other Publications Available – More detailed information on particular steps in the cooperative-forming process is contained in other publications of the Farmer Cooperative Service. Single copies of the publications listed below may be obtained by writing Publications, Farmer Cooperative Service, U. S. Department of Agriculture, Washington, DC 20250.

1. Cooperatives in the American Private Enterprise System – Educational Aid 5, C. H. Kirkman, Jr.
2. Cooperatives – Distinctive Business Corporations – FCS Information 65, C. H. Kirkman, Jr.
3. Co-ops – A Tool to Improve and Market Crafts – Reprint 363 from News for Farmer Cooperatives.
4. Sample Legal Documents: Legal Phases of Farmer Cooperatives – FCS Information 66.
5. What Are Cooperatives – FCS Information 67, C. H. Kirkman, Jr.
6. Manager Holds an Important Key to Co-op Success – FCS Information 74, C. H. Kirkman, Jr.
7. Members Make Co-ops Go – FCS Information 72, C. H. Kirkman, Jr.
8. How to Start a Cooperative – Educational Circular 18, Irwin W. Rust.
9. Improving Management of Farmer Cooperatives – General Report 120, Milton L. Manuel.
10. The Cooperative Approach to Crafts – Program Aid 1001, by William Seymour (contains sample bylaws, marketing contracts, craft surveys, etc., not published in the Journal)

Many states have craft guilds, craft associations, or State agencies set up to assist local groups. Also managers of other cooperatives can provide assistance.

Nationally, agencies that may be able to assist are:

1. American Crafts Council, 29 W. 53rd St., N. Y., NY 10019
2. Associated Council of the Arts, 1564 Broadway, N. Y., NY 10036
3. American Federation of Arts, 41 E. 65th St., N. Y., NY 10021

On a regional basis, agencies that may be able to assist are:

1. Appalachian Regional Commission, 1666 Connecticut Ave., N. W., Washington, DC 20251
2. Southern Highland Handicraft Guild, P. O. Box 9145, 15 Reddick Rd., Asheville, NC 28805
3. The Commission on Religion in Appalachia, Inc., 864 Weisgarber Rd., Knoxville, TN 37919

The following publications – in addition to those of Farmer Cooperative Service – may be of help:

1. Handicrafts and Home Businesses, Reprint March 1970, No. 1, Small Business Administration, Washington, DC 20416. No charge.
2. Selling by Mail Order, Reprint December 1969, No. 3, Small Business Administration, Washington, DC 20416. No charge.
3. A Handbook and Resource Guide for New Craft Groups, July 1970, The Commission on Religion in Appalachia, Inc., 864 Weisgarber Rd., Knoxville, TN 37919.

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PIECES SELECTED BY THE VATICAN FOR THEIR PERMANENT COLLECTION

(reprinted with permission from Friends of American Art in Religion – formerly the Committee of Religion and Art of America)

During the "Craft Art and Religion" Seminar of 1978, the Committee directed its attention to the issue of developing universal standards for the recognition of crafted works as fine art, and the need for a better understanding and acceptance of crafts in the ecclesiastical world. One of its goals has been to place the finest inspired contemporary American art in the prestigious Vatican Museum.

Since the establishment of the Vatican Gallery of Modern Art, the Committee of Religion and Art of America has helped to secure for placement in this gallery 38 works by American artists of the 20th Century. In October of this year, the Vatican selected seven more pieces from the exhibition at the 1978 Craft Art and Religion Seminar for inclusion in their permanent collection of contemporary art. This is a major step forward since one of the main goals of the 1978 Seminar was to encourage the integration of craft with fine art in museum collections. The final selections were narrowed down to objects which were ecclesiastical in concept, although the outstanding quality of every piece made these decisions difficult. Other than the Christensen "Chalice" which the artist has generously given to the Vatican, the Committee is contributing the selected pieces to the Museum.

Metal's display at the 1978 "Craft Art and Religion" Exhibition held in Rome at the Vatican Museum.

Torah Pointer, 1978
William Harper (Florida)
Gold and silver cloisonne enamel on fine silver and inlaid 24k gold, 14k gold, copper electroformed, shell
Length excluding chain: 4½ inches

William Harper

In creating this piece, William Harper wanted it to possess qualities of dignity and respect while, at the same time, fitting into the framework of his total body of artwork – not existing as a separate entity. The torah pointer seemed to be a vehicle through which he could create a religious piece of art as well as to utilize his own creative artistic techniques.

The designs on his "Torah Pointer" are not merely decorative, but have symbolic value. He adapted ancient signs and symbols of water, as well as for God, as motifs for the piece. Most Jewish religious objects still cling to anachronistic design styles, especially of the Baroque period; he wished to create an object which was thoroughly of and about our time, and yet seemed timeless.

William considers himself an enamelist and goldsmith, though he also works with a wide variety of other materials such as shell, hair, Japanese pearls, teeth, ivory, ebony. He says of his work, that it usually does not appeal to a large number of people, but that he generally makes pieces for his own personal satisfaction as opposed to working for commission. Very frequently his artwork has been described as having a "fetish" quality about it, since it involves the assemblage of various materials and objects and often elicits strange reactions/emotions from its viewers.

He believes that some mystery about his artwork enhances the total imagery. There doesn't necessarily have to be an explanation for what his pieces are – their value stems from the fact that they "just are."

For the past 2 to 2½ years, William Harper has primarily created jewelry. Prior to that he worked in creating three-dimensional objects using metal and enamel.

William Harper is Associate Professor at the School of Visual Arts, Florida State University.

right

Gift of the Primal Image, 1977
Mary Ellen McDermott (Ohio)
Reliquary
Champleve enamel on copper, walnut core
Height: 7 inches; width: 7 inches; depth: 3½ inches

Mary Ellen McDermott

This artist said of her reliquary that "there was a very personal and definite purpose in my creation of the 'Reliquary, Gift of the Primal Image.' I was led by the person and power of the Holy Spirit to present God as Lord and Creator of all things, the Primal Image."

Mary Ellen McDermott usually creates objects which have liturgical significance – objects such as the crucifix, chalice, candelabra – and forms them of enamel on silver, copper, or gold. She has developed a method of firing enamel on copper when creating some very large pieces. Her work is not strictly limited to pieces with religious value, for she has executed many architectural commissions – both liturgical and secular. She has done interior and exterior work for churches, banks, and public libraries.

Mary Ellen McDermott is Professor of Enameling and Chairman of the Enameling Department at the Cleveland Institute of Art.

The Chalice, 1976
Hans Christensen (New York)
Sterling silver and bronze: raised and formed
Height 8¾ inches; diameter: 4 3/8 inches

Hans Christensen

Hans Christensen sees the cup itself as the focus of the whole chalice, because the cup symbolizes what is inside it – the wine. Therefore, the base, which holds the cup, was designed to emphasize it. The lines are simple, and lead the eye up to the cup.

Hans considers himself a silversmith, although this doesn't mean he cannot work in other materials. In working with silver, the most important and useful tool for him is the hammer. He finds more satisfaction in using this simple tool (creating objects in their purest form – as he states it) rather than utilizing more complex machinery. He believes that in the modern world, we have enough of the mass produced object; through working by hand, he can come closer to the "essence of man." Individual creations, personal possessions, which are unique and unlike any other object (as opposed to the mass produced market) contribute to a sense of personal identity and add a personal touch to one's environment.

Hans Christensen is a Professor at the School for American Craftsmen, Rochester Institute of Technology.

Mary Ann Scherr

The "Torah Shield with Pointer" was specifically made for the Judea Reform Congregation in North Carolina in honor of the retirement of one of their Rabbis. It was a memorial to him, kept by the Congregation and linking their Jewish faith, the Rabbi, and the artist herself. The Judea Reform Congregation has generously permitted the original piece to remain with the Vatican, and Mary Ann Scherr is creating an exact replica for the Congregation.

Mary Ann believes that art creates a link between groups and ideas. It is rare for her to create a piece of art without having first talked to a person or persons for whom a particular piece will be individually designed.

In designing her jewelry and objects, her two main concerns are the imagery and function of the pieces of art. Imagery: how the object appears to the viewer, the impression it creates, the feeling evoked by it in the owner of the piece, the sense of pride felt by the artist having created a beautiful and unique object. Function: for example, the jewelry which Mary Ann creates has a function of "adorning" the wearer, expressing that person's taste. Her art therefore, is personal, purposeful, functional.

She feels that what one wears is very much a part of one's personality, a direct expression of and statement about the person. One's personality may be illustrated in everything one touches – objects of art one owns, jewelry, clothes, furnishings in the home, etc.

People must be comfortable with what they wear. Therefore, when she creates jewelry for someone she designs it with the uniqueness of the person in mind.

Currently, Mary Ann is involved in research on "Monitoring Jewelry" – jewelry which can monitor body functions or the air.

See cover for Mary Ann Scherr's "Torah Shield with Pointer."

Set of Three Altar Candle Holders, 1977
Thomas Markusen (New York)
Sterling silver plated copper
Hot formed by sinking them refined; work hardened by cold forming process
Diameter of each: 2 inches
Heights: 13 inches, 16 inches, 19 inches

Thomas Markusen

Thomas Markusen is a metalsmith and works with all metals ranging from gold and silver to wrought iron, copper, bronze, and brass. He utilizes the "hot forming technique" which is a quick, direct process of forming red hot metal into desired forms. During this process, Thomas feels that the physical characteristics of the metals lead the artist into a very direct relationship with the materials, meaning that in order to form shapes or objects from metals, the metal must be in a "read heat" state – and the artist must work very rapidly before the temperature cools.

He works directly in the metal, without doing much drawing of concepts or images before beginning to actually form a metal object. Thomas Markusen feels that metal is a responsive material. The metal responds to the technique used which causes the artist to respond further to the metal. In this way there is a direct interaction between the artist and the materials used. The artist must work quickly and rapidly to form his piece of art.

Regarding his "Set of Three Altar Candle Holders," he said that he liked the contrast between smooth and textured metal. He chose to make three of them because he felt that altars are usually very symmetrical, and the use of these three candle holders would serve to break up the symmetry and give the altar a more contemporary look.

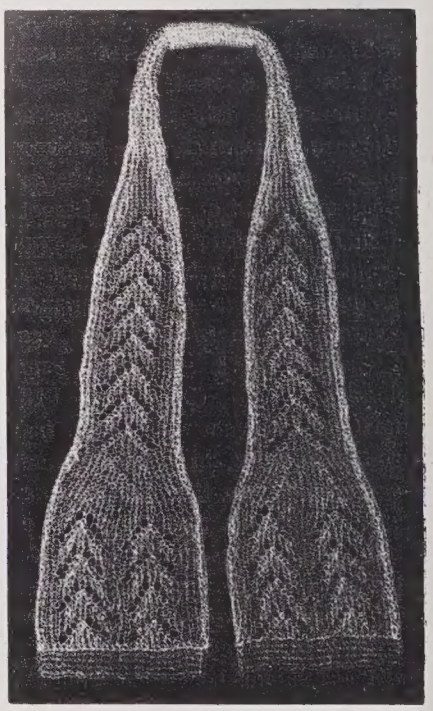
Thomas Markusen is Professor of Art at the State University of New York at Brockport.

Arline Fisch

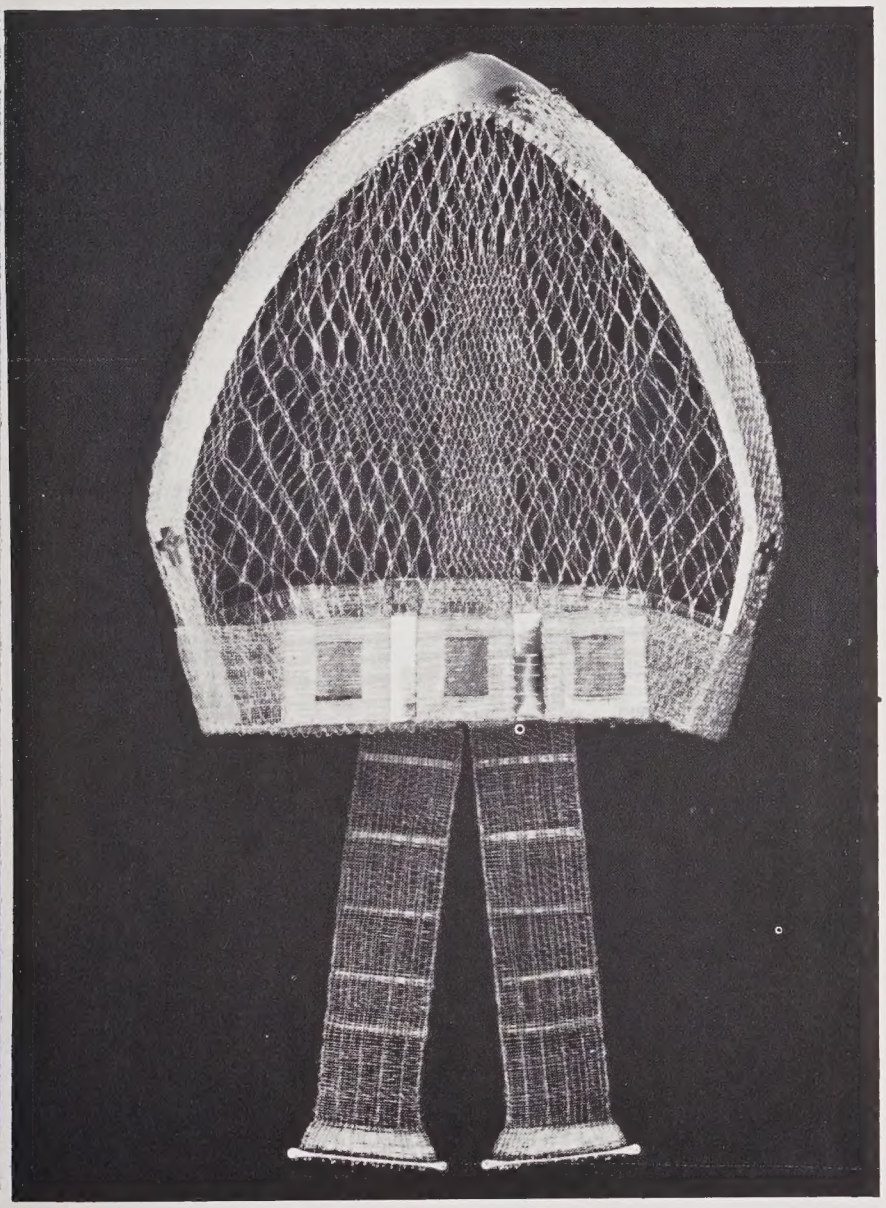
The "Bishop's Mitre" possesses a shape that has always intrigued Arline Fisch. Being exposed to and involved in Catholic ceremonies and rituals throughout her life, she was impressed by the regality of this object – the regal appearance of a person wearing the mitre. She also finds that the "Ecclesiastical Stole" is a natural development out of her other artwork; it is a form that drapes, as do many of her jewelry pieces.

When Arline designs jewelry she does so with the goal of enhancing the appearance of the person who will wear it; she is concerned with the total statement it will make. Though often her pieces are on a large scale, they retain an air of delicacy through her use of weaving, knitting, and crocheting of gold and silver.

Arline Fisch is Professor of Art at San Diego State University.



EXCERPT FROM BRENT KINGTON'S PRESENTATION AT THE 1978 SECOND INTERNATIONAL SEMINAR "CRAFT ART & RELIGION" AT THE VATICAN MUSEUM, ROME.



Bishop's Mitre, 1976
Arline Fisch (California)
Fine and sterling silver, 14k gold
Sprang, loom weaving in fine silver; fabrication in sterling silver, accents in 14k gold

left
Ecclesiastical Stole, 1976
Arline Fisch (California)
Fine and sterling silver, 18k gold
Knitted construction

The above material was gathered during informal interviews with each artist.

OPINIONS AND GOALS OF ARTISTS

by L. Brent Kington

"While thinking about my topic for this seminar, I could not help but reflect upon the historical partnership of craftsmen and religion throughout the ages. Many of the beautiful art objects that we enjoy today, often hundreds of years after their execution, were made by craftsmen as an act of worship or as a contribution to enhance the worship of others."

"I recognize that many craftsmen enjoy a direct client-craftsman relationship. These artists like to have specific goals and requirements to work toward. Solving specific problems and satisfying the client serves as a stimulant to their work. For me, this approach has often seemed restrictive and inhibiting to my work habit. Of course I enjoy the acceptance and appreciation of my work as much as any artist. However, I am much more comfortable when, after a piece is completed, a viewer sees it and wants to possess it. He wants to possess something that came from me and is a part of me and yet he has found something of himself reflected in it also. No compromises or immediate outside influences were imposed as the work was taking form. As the maker, I had taken a great many chances and I had often flirted with failure. The risks were all mine; shared with no one. Now my satisfaction is heightened and reassured when someone else wants to include it in his life. And so I work alone, selecting my theme, utilitarian or non-utilitarian, and I continue to take the risks that are the well-spring of creativity."

"When my work is right; when the mental image and the finished pieces are allied into one, I am energized both physically and creatively. I receive energy both from the work process and from the ideas that the form suggests. I see opportunities for variations in form and line; new ideas flow freely. Many times, as I am engaged in the work process, the object will change a number of times, becoming much different from the original concept. On occasions, I have become so stimulated by a new or altered idea that has developed as I have worked that I have left the piece and explored the new idea as fully as possible before completing the earlier one."

The proceedings of the 1978 "Craft Art and Religion" seminar as well as the illustrated catalogue of the exhibition are available from the Committee at the cost of $10 each. Checks may be made payable to "Friends of American Art in Religion, Inc." and sent to our office at 1011 First Avenue, New York, NY 10022. Not-for-profit organizations serving the arts may request copies without charge by writing to us on their stationery.

The proceedings of the 1976 seminar "The Influence of Spiritual Inspiration on American Art" were mailed to major art institutions and universities. A limited number of copies are available to institutions and societies with libraries on their request.

Please send us any comments or questions that you might have.

GOLDSMITHS, METALSMITHS, JEWELERS: THEIR TRAINING AND EDUCATION IN CONTEMPORARY GERMANY

by Ann Grundler

PART I: VOCATIONAL TRAINING

There are two good reasons for me to focus on Germany. First, I went through an apprenticeship program there myself, and secondly Germany is the most progressive country in the jewelry field today. The industry is concentrated in the city of Pforzheim. It has 800 jewelry firms and produces 75% of all jewelry made in Germany and 40% of all jewelry made in Europe. However, accomplishments and high points of other Europeans cannot be overlooked.

One reason for the success of the industry is an attitude found more frequently in Germany than here in the USA: pride in their workmanship by the employees and appreciation of quality work by the employer. As a sign on the wall of the jewelry firm of Celluci & Gomez in San Francisco reads: "Good enough is not good enough." In this shop model maker, caster, and shop foreman are first generation Germans. Judy Skoogfors reports about a visit to a high class jewelry shop in Zurich, Switzerland: "The degree of craftsmanship is overwhelming and so satisfying visually that we suddenly felt a tremendous lack in the general level of skill in the production of one-of-a-kind jewelry in the U.S.A."

In Germany the fundamental way of learning a trade and of acquiring all the needed skills is by serving an apprenticeship. Before a student completes the ninth grade of public school, he and his parents try to find a master of the desired trade who is willing to train him or her. The two parties sign a contract (lehrvertrag) for three or three and one-half years, the latter in the case of goldsmiths, that becomes binding after three months.

For the training of a journeyman goldsmith, the following skill and knowledge is required:

In the first half of the apprenticeship – simple sketching and drawing; melting of metal; forming simple alloys; rolling and drawing metal; hardening, tempering, heat treating; sawing, drilling; bending, adjusting; filing, scraping, sanding; silversoldering; grinding, boiling; polishing; transferring drawings onto metal by tracing and layout; fitting and assembling parts; cementing, fastening with putty; gold leafing; enameling; building models; winding springs; finishing; caring for tools and making small tools; the properties of materials and how to work them; precious and gem quality stones; art history; safe working conditions and labor laws.

In the second half of the apprenticeship: rendering and drafting; all methods of melting and alloying; all types of castings; forging; cutting threads; chasing of sheet and wire; alloying solder; rolling-on precious metal; goldplating, silverplating, coloring; difficult fitting and assembling; adjusting; setting stones in many different manners.

Between the first and second half of the training there is an examination to assess the acquired skills.

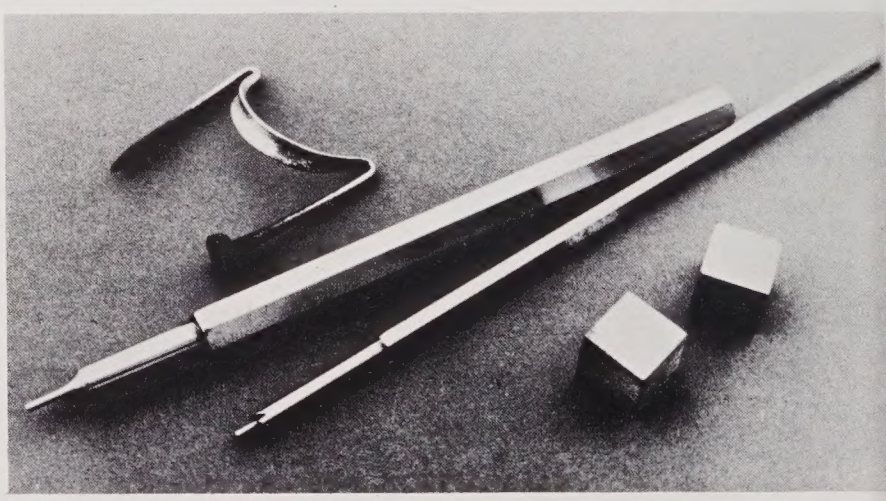
One day a week is reserved for trade school. There the apprentice has two hours of general education, four hours of theoretical instruction relating to his trade and three hours practical instruction. I personally served an apprenticeship to become an optician. The general education at the trade school included business math and algebra, political science (like citizens' rights and duties), and writing business letters. After three hours of this we had a master optician, a guild member, instruct us in optics (science of light), the anatomy of the eye, optical instruments, and metallurgy. For over a year we had instruction from an engineer and draftsman to learn the rudiments of technical drawing as opposed to sketching. From a fine mechanic (instrument maker, precision mechanic) we learned to file. He gave us a fourteen inch file and a one and one-quarter inch pipe and the end had to form a plane 90 degrees to its side.

The other four days a week are spent working with the master, other journeymen and apprentices in the shop. Some basic skill will soon be acquired to contribute to the output of the shop. However, the master has the obligation to teach and let the apprentice practice all skills he has to master for the trade, even if it is costly (because of the materials and tools he might ruin and the time used that could be spent more profitably in routine work). The special skill acquired by the apprentice might not be used often and could be performed by other employees. However, the quality of the education varies greatly. Yet there is pressure from the guild and the chamber of trades, which conducts the final examination, to have apprentices emerge with respectable skills.

I was the only apprentice in a branch shop with the master, who ran it. The incoming work did not take half of the hours we had to be there. Besides the basic work of edging and setting the lenses, he taught me how to make metal and plastic frames from stock, and to make small hand tools. In the process I learned to saw, file, sand, and polish metal and plastic. I also learned to form metal, silver solder with a blow torch and heat treat tools. In addition I learned to drill glass, and design and build elegant displays. Yet the demanded practical skills are considered modest as required of an optician compared with many other trades.

The small pay I received as an apprentice at that time, in 1953-56, covered only a fraction of my modest living expenses. Now the set rate is much higher, the regulations spell out more specifically what an apprentice may or may not do (cleaning and running errands). In fact conditions have so improved in favor of the apprentices that few employers find it profitable to train any.

Filing and forging exercises. 1953-56 as apprentice. From top: Bridge filed and forged from nail. Punch and spotfacer filed to hexagon, hardened, tempered. Steel dice filed 1 cm square.



The quality of the instruction in the trade school varies widely too, especially for trades that have few apprentices as goldsmiths, watchmakers, opticians, and dental technicians. My district had no more than 15 - 20 apprentices for optics, first through fourth year level. Also, it depends on who volunteers from the guild to instruct. Of course, in a city with as many workshops as Pforzheim, schools employ professional teachers. The trade school there – the Goldschmiedeschule - offers classes in goldsmithing, silversmithing, stonesetting, metal spinning, casting, electroplating, repousse, chasing, engraving, enameling; also production techniques, metallurgy, lapidary, and drawing, rendering, and design. Another school for apprentices that specializes in the trade is the Fachund Meisterschule fur Gold-und Silberschmiede der Stadt. Meisterschule fur Bau- und Kunst-handwerker in Munchen.

As an alternative to serving a three and one-half year apprenticeship, fourteen or fifteen year olds may attend the Goldschmiedeschule full time for two years and then find an opening for an apprenticeship for one and one-half years, and probably will be more readily accepted.

Occasionally the apprenticeship can be contracted for two years, if the applicant is over 18 and has some higher education like the Abitur (equivalent to Associate Arts Degree) or is learning a second trade as in retraining of a handicapped person, but never open to a youth of 15.

Most apprentices apply after the contracted period (but occasionally some later) to take the final examination. It covers all material studied in the last three and a half years. In my case it took approximately three hours each for general studies, for the written and the oral theoretical part, and one day for the practical part. Also all written material from the three and a half years had to be turned in (including the weekly progress reports that an apprentice has to write) and all will be evaluated with the result of the examination. The committee, the guildmembers, then conferred briefly and presented the journeyman's papers with grades in each area, or informed the apprentice that he had failed.

The journeyman may now work under the supervision of a master in his trade and participate in the training of apprentices. After three to five years of employment as a journeyman in his trade, he may take the master examination. It requires study after work for one to two years; classes offered by the chamber of trades have to be taken and an approved project has to be satisfactorily completed, or he may attend a school full-time. The schools mentioned before in Profzheim and Munchen can be attended for this purpose, and there are three other schools that have preparation courses for the master examination only. They are in Dusseldorf, Hamburg-Altona, and Koln.

The regulations governing the examination for a master goldsmith are issued by the cabinet member for education and science. They come in four parts and cover nine printed and typed pages. Part one deals with the practical aspects. It first gives a profile of this trade covering all activities, knowledge, and skill expected of a goldsmith. It goes on to describe the master piece (it should not take more than 16 days to produce, and a work sample, eight hours). Part two lists the requirements for the academic part as related to goldsmithing; part three as related to commerce and law (labor law, taxes, social contributions); part four as related to education (of apprentices).

A master goldsmith can open his own shop, join the guild, and train apprentices if he is over twenty-five years of age. He may work for someone in a preferred position, as branch leader or supervisor. To call oneself a master goldsmith, one has to serve an apprenticeship and pass journeyman and master examinations. Merely acquiring the equivalent skills will definitely not do in Germany.

PART II: INTELLECTUAL STIMULATION

In part one I tried to give you a thorough understanding of the apprenticeship training, especially that of the goldsmith. This training is essentially vocational; most successful in that respect, but for intellectual stimulation as you find in the California University system, I would like to point out other stimuli and educational facilities.

I credit five men with leading the jewelry developments in Germany to its present heights. They are the most influential on the younger generation of German and even European designers and gestalters (both designer and creator). Karl Schollmayer is dead now. He was director of the Fachhochschule fur Gestaltung in Pforzheim. He had Friederich Becker and Klaus Ulrich as his students when he was teaching on the Werkkunstschule in Dusseldorf and created a fine book about jewelry: Neuer Schmuch, ornamentum humanum.

The other four are Reinhold Reiling, Klaus Ulrich, Friedrich Becker, and Herman Junger. Reinhold Reiling is professor at the Fachhochschule fur Gestaltung in Pforzheim. He served an apprenticeship as steelengraver and chaser and studied on the Kunstgewerbeschule in Pforzheim and in Dresden. Klaus Ulrich is professor at the same school. He has the Abitur, served an apprenticeship both in gold and silversmithing, and became a master in both trades. He completed his studies with the staatsexamen as gestalter (high academic degree) at the Werkkunstschule in Dusseldorf. Friederich Becker first served an apprenticeship as machine fitter and worked in precision mechanics. He also served an apprenticeship each in gold and silversmithing and he became a master goldsmith. He studied at the Werkkunstschule in Dusseldorf with Professor Schollmayer. It is now the Fachhochschule fur Design where he is a professor.

Herman Junger went to the Zeichenakademie in Hanau with a major interest in silversmithing. He then studied on the Akademie der Bildenden Kunste in Munchen. He is a professor there now. All four create one-of-a-kind jewelry. Through participation in shows in Germany and other countries and through reports about them and photos of their work in trade magazines and books, they influence many jewelers throughout Europe and even the rest of the world.

They especially find a receptive and well educated audience at the schools they teach. All three schools they teach at and also the Zeichenacademie in Hanau and the Fachlochschule fur Design in Schwabisch Gemund specialize in gold and silversmithing and metalsmithing as it relates to jewelry. Other schools as the Fachhochschule fur Design in Aachen teach metalsmithing, but not specifically jewelry. Bob Owens studied for a year there. He says that their technical and design approach was superb. They worked in all metals, but no directly in jewelry. He feels it is "the best blacksmithing school on the planet." High

standards are maintained through the selective process. "Regular students must have the Abitur. Gasthorer are subject to approval by their professor." Of course, the preferred school for jewelers is the Fachhochschule fur Gestaltung in Pforzheim. The qualifications needed are the Abitur or special permission. Alan Revere studied there with students from fifty other countries. The instruction at this school includes the technical aspects as well as the design aspects, but the Fachhochschule functions on a much higher level than the Goldschmiedeschule mentioned in connection with the apprenticeship program. Besides jewelry it offers studies in Gerategestaltung (silversmithing of ceremonial vessels and objects, etc.). Upon completion, students are graduate designers. In both directions the Staatliche Abschlussexamen may be taken.

In a letter, Professor Hermann Juenger, pointed out some differences between a Fachlochschule and an Akademie der bildenden Kuenste (academy of the fine arts) as the one in Muenchen: to be admitted to a Fachhochschule the Abitur (A.A. Degree) is required, but not to the Akademie der bildenden Kuenste, (except for art education and interior decoration). The goldsmithing class is a relatively small area of this academy – its subjects are predominantly ruled by painting and sculpture. Basic training is NOT acquired here (as in an apprenticeship) and the basic skills of a goldsmith are taken for granted.

The purpose of the academy is rather to give a few artistically talented students an atmosphere of freedom; for students that see themselves as free artists and want to prepare themselves as such. The goldsmithing class is limited to 20 students. They may repeat the class up to 12 times (12 semesters or six years of study). The academy in Nuernberg has a similar class.

Just as foreigners study in Germany, Germans study and work in other countries. Barbara Gosch studied at the Hochschule fur Angewandte Kunst in Prag, others worked in Switzerland, Italy, and England. Many participate in shows held in Germany, Italy, Switzerland, England, and Czechoslovakia, guaranteeing a great exchange of ideas and styles. Especially in the 70's there has emerged a new generation of Schmuckgestalters (idea, design, composition, and execution of a piece of jewelry by one person), both men and women. Many come from Germany and England, but also from Austria, Italy, Spain, Holland, and Czechoslovakia. With this generation I arrived at the present. Jewelry can now be seen as an object of art. I am excited about the future.

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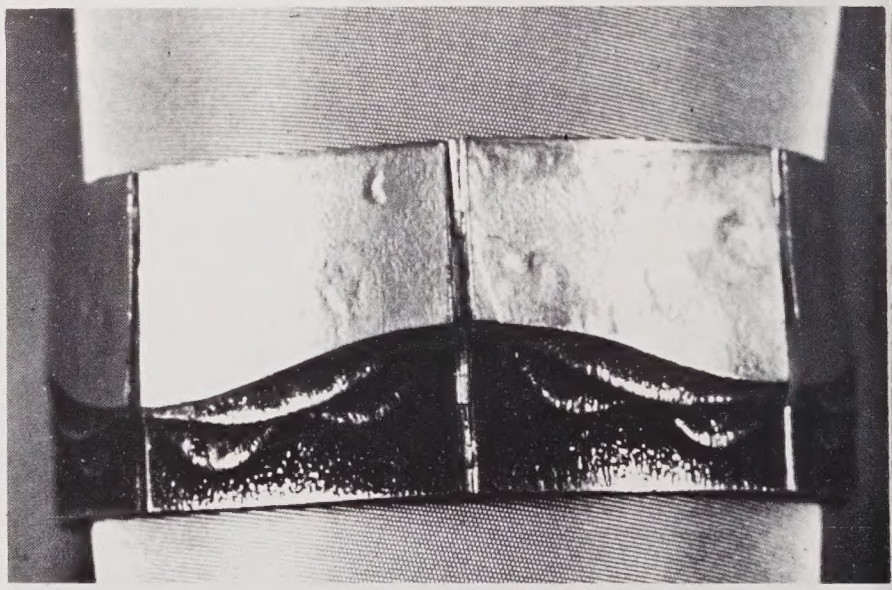
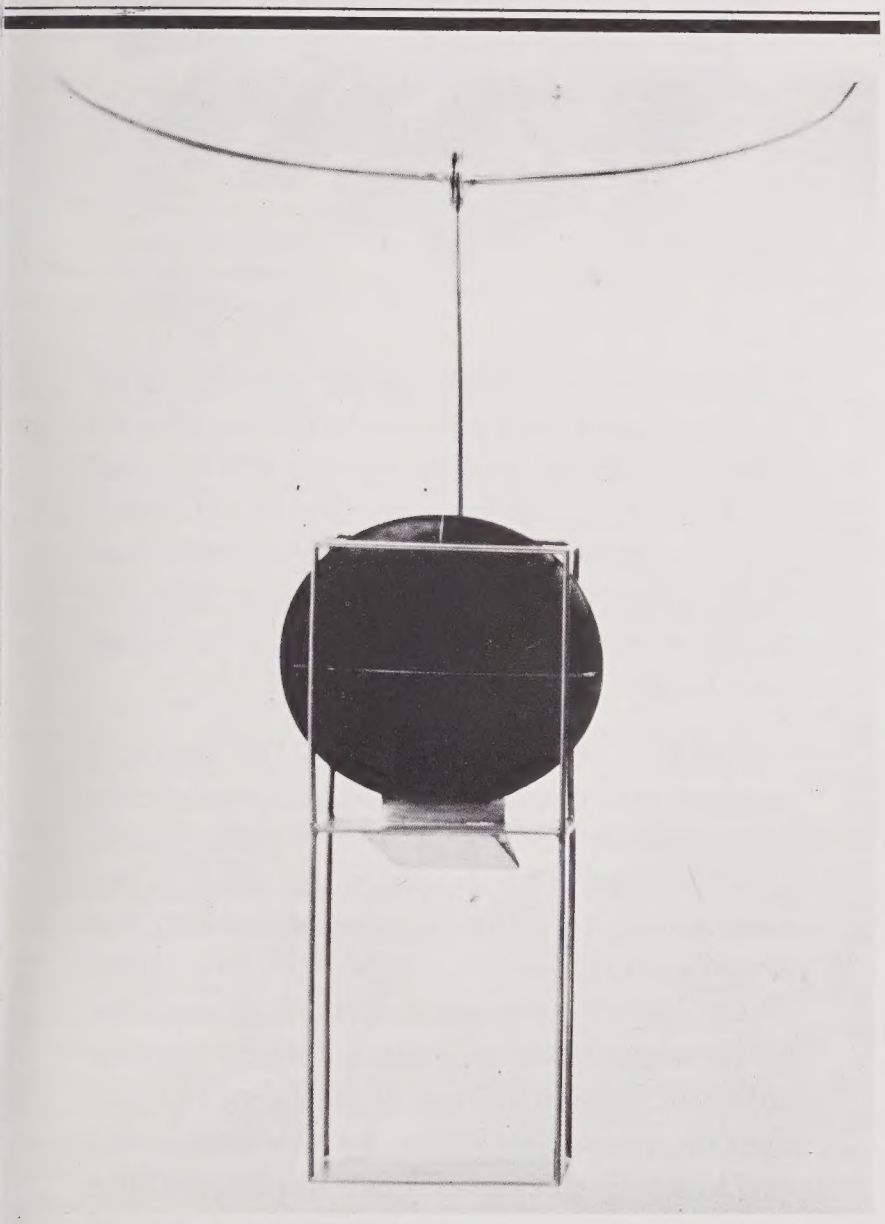
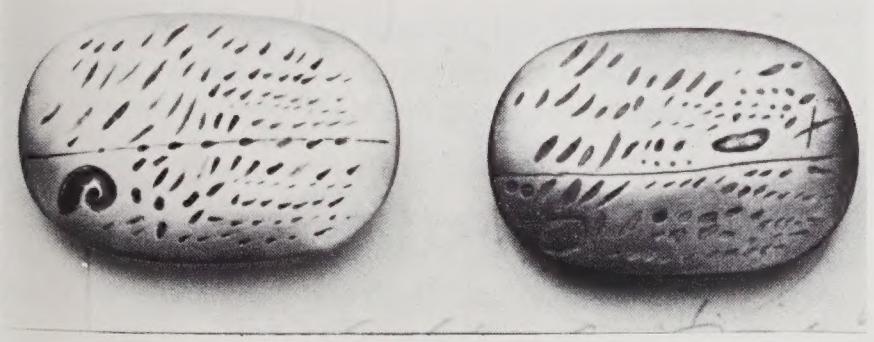
Friedrich Becker tea pot, 1977
silver, wood



Klaus Ullrich, bracelet, fine gold, silver



Reinhold Reiling, necklace, 1976, 18k gold, silver



Herman Junger, two brooches, 1977, silver, gold

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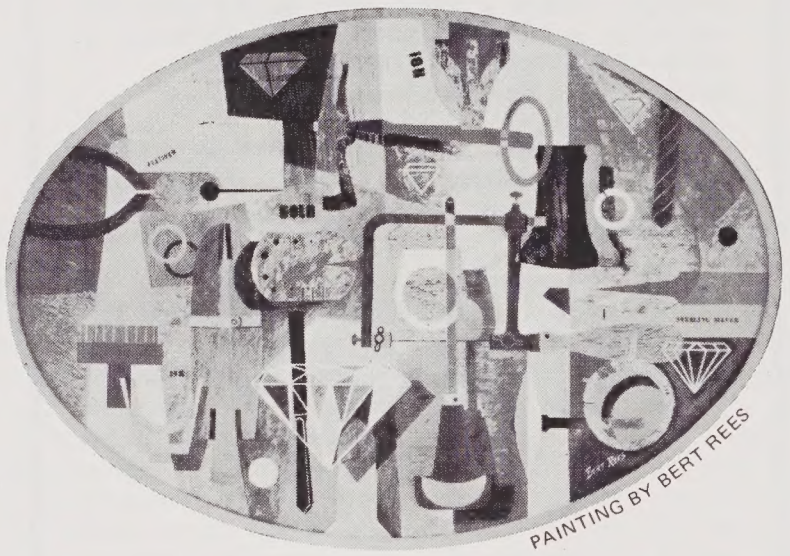

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ORGANIZATIONAL NEWS

PRESIDENT'S REPORT – OCTOBER, 1979

The Board of Directors met August 26 & 27, at the home of Tom and Mary Markusen. As of July 16, SNAG has become a non-profit educational corporation. As such, it is required to have a Board of Trustees rather than a Board of Directors. By a unanamous vote of the officers, the Society's existing Board of Directors were appointed as Trustees. We have been consulting a law firm so that we are sure, as we grow and change, it is done within all the various governmental regulations.

Financially, SNAG has made a resounding come-back from its position way in the red of a year ago. Office record keeping, membership lists and dues billing, after some initial confusion caused by converting to computer, has settled down and is generally running smoothly. However, as has often been stated, it is MOST important to renew memberships or notify of change of address 6 WEEKS in advance of a Journal mailing so that things can get onto the computer. A significant factor in our revenue this Spring has been the increased number of Journal advertisements. Please consider patronizing our advertisers; they have shown support for SNAG and it is through keeping and increasing advertisements that we will be able to upgrade the Journal and expand other programming without increased cost to you.

Our main topic of concern at our meeting was the future of the Journal. Because we had seen the improvement in our financial status, a budget line to hire an editor was submitted and approved by the membership at our annual meeting in Boston. Lynda Baldridge has been serving in this capacity since July 1, but does not wish to continue after the February issue. The Society is now in the process of accepting applications for this position and has placed advertisements in several publications to that effect. Anyone interested in being considered should submit a resume, list of references and a letter stating qualifications and giving some thoughts on how our publication might develop in the future. These can be sent to any of the officers or board members, but IMMEDIATELY, as it is planned that a decision will be made by our next board meeting in early November. This Journal is the main vehicle for communication among our membership and quite an important part of the organization. I cannot stress enough, that if any of you have suggestions as to changes you would like to see in the Journal, that you voice these to a member of your Board.

There are several projects which have been long delayed and to which we are now, at long last, turning our attention. We will be having a graphic designer do the art work to be used on stationery, membership cards, certificates and the hallmark stamp, so that these should all soon be available. We are also pursuing the project of re-printing the nine technical papers, to be bound together in one volume and distributed to libraries and schools under our Tiffany grant. Extra copies will be made available for individual purchase.

The 1980 conference will be held in Tucson, Arizona, March 27 - 29, and we are again accepting proposals for technical presentations. As previously, authors need not be members of the Society and need only submit a title and brief description along with any supportive material which may help the Board in making its decision. These must reach us by NOVEMBER 1, 1979, and can be sent to me. Manuscripts of accepted papers must be ready for printing in January to insure they will be ready for distribution at the conference.

Mike Croft assures us we will be visiting a copper mine and smelting facility near Tucson in addition to our regularly scheduled meetings and lectures and that the Southwestern style of hospitality – barbeque and Mexican band – are being planned. More specifics will be listed in the December Journal.

Chairperson of the new Membership Committee for the coming three years is Marcia Lewis. Chairperson of this year's Nomination Committee is Eleanor Moty.

I had a fantastic summer traveling around the country to various workshops; saw so many friends, made many new ones, indulged myself with beautiful views of the Pacific, Rockies and Smokies and am now really ready to get back to my students and my bench. I hope this summer has been as generous to you all.

Mary Lee Hu
President

SOCIETY OF NORTH AMERICAN GOLDSMITHS

The Society of North American Goldsmiths is accepting proposals for technical papers to be presented at its next annual conference to be held March 27 - 29, 1980, in Tucson, AZ.

Topics related to all aspects of metalsmithing or jewelry are welcome; authors need not be members of the Society. Presentations should be limited to one hour, and authors are encouraged to augment presentations with visual materials whenever possible. Papers will be distributed to conferees in addition to being published in the Society's Goldsmiths Journal and are solicited in the spirit of free exchange of information under which the Society was founded.

Proposals should consist of a title and brief explanation of the topic along with any other supportive information the author feels will help the Board of Directors in their selection.

Proposals of any questions may be forwarded BEFORE NOVEMBER 1, 1979, to:

Mary Lee Hu
Art Department
Michigan State University
East Lansing, MI 48824

Copper 2

The second Copper, Brass, and Bronze Exhibition, is sponsored by the University of Arizona Museum of Art and the Department of Art with grants from the National Endowment for the Arts and the Copper Development Association, Inc. The purpose of the exhibition is to display and reward creative efforts in the medium of copper and copper alloys.

Date: March 2 thru April 6, 1980.
$5,000.00 in cash prizes.
Jurors: Fred Fenster, Gene Pijanowski.
Extensive catalog of show.

For entry forms contact: Michael Croft or Robert Cardinale
Copper 2
Museum of Art
University of Arizona
Tucson, Arizona 85721

FINANCIAL REPORT FISCAL YEAR 7-1-78 TO 6-30-79

Balance on Hand as of 6-30-78		$ 1,351.32
Income:		
Dues & Miscellaneous	$45,509.09	
Interest	10.87	
Grants	8,000.00	
Advertising	6,067.34	
SNAG Stamps	587.00	
Conferences (Seattle, St. Louis, Boston)	2,106.81	
Postage	874.50	
Extra Journals	1,400.82	64,556.43
Total Cash on Hand (7-1-78 to 6-30-79)		$65,907.75
Disbursements:		
Salaries, Taxes & Workers Compensation	7,220.48	
Telephone	914.72	
Postage	1,413.08	
Office Supplies & Expenses	1,377.51	
Printing Stationery	678.42	
Journal Expenses	16,323.99	
Assets Purchased	829.49	
Conference Expense	1,144.27	
Audio-Visual	585.09	
Board Expenses	1,074.50	
Travel	221.00	
Computer Services	1,115.68	
Professional Fees	924.62	
Miscellaneous:		
Refunds	125.03	
Chargebacks	29.93	
NEA Grants	5,000.00	
Dues & Subscriptions	130.40	
SNAG Stamps	250.00	
Schmuckmuseum Catalogs	1,626.36	
New York Craft Show	131.14	$41,115.71
Working Capital for the Next Fiscal Year		24,792.04
		$65,907.75

William A. Neumann, Secretary-Treasurer
June 30, 1979

S. N. A. G. AUDIO VISUAL SERVICES

When a person submits a portfolio and is accepted as a pro-member, that group of slides becomes the basis for the major part of our rental library. The sets are kept up-to-date by the member on a regular basis. The sets are catalogued by individual in separate carousels. Three copies of each set are available for rental.

Rental Fees

Pro member	$2.00 (postage costs)
Associate & Student	$7.00 (rental plus $2 postage)

Available Sets

Individual	No. in set
Abramson, Maurice	37
Adams, Jay	20
Arentzen, Glenda	54
Armstrong, Roger	20
Bagnal, Joel	21
Baldridge, Mark	20
Bennett, Jamie	45
Bernstein, Bernard	25
Betteridge, Lois	25
Blodgett, Peter	25
Bondi, Steven	20
Choo, Chunghi	20
Daunis-Dunning, Patricia	32
Davidson, Jaclyn	31
Dejong, Bev	39
Dipasquale, D.	20
Ebendorf, Bob	60
Evans, Chuck	32
Evans, Gerry	29
Fenster, Fred	13
Fike, Philip	20
Fisch, Arline	27
Fisher, Robert	26
Fix, John	20
Fossee, Jackie	23
Gabriel, Hannelore	40
Getty, Nilda	35
Gold, Debra	25
Graham, Anne Krohn	20
Griffin, Gary	46
Gunther, Randall	20
Hanes, Drewry	20
Helzer, Richard	41
Hentz, Chris	20
Higgens, Ed	20
Hu, Mary Lee	58
Johnson, Don	34
Kallenburger, Klaus	27
Keens, David	24
Kielman, Hero	20
Kuehnl, Claudia	25
LaRoche, Lynda	20
Larson, Gail	20
Leupp, Leslie	27
Lewis, Marcia	58
Link, Val	40
Loyd, Jan Brooks	20
McLean, George	53
Mafong, Richard	25
Malenda, Jim	35
Markusen, Tom	65
Marshall, John	48
Martin, Eric	28
Matzdorf, Kurt	80
Mawdsley, Richard	49
Mazurkewicz,	20
Mergen, Paul	20
Metcalf, Bruce	20
Meyer, Jim	26
Michaels, Eunice	22
Minor, Barbara	20
Mitchell, Robert	20
Montgomery, Robert	10
Morris, Kelley	20
Morton, Phillip	21
Moty, Eleanor	37
Muller-Stach, Dieter	20
Myers, Paulette	32
Neumann, William	20
Niemi, Edwin	41
O'Connor, Harold	80
Paley, Albert	80
Paul, Natalie	30
Peck, Lee	25
Phillips, Carol	22
Pijanowski, Gene	24
Pijanowski, Hiroko	26
Pijanowski, H & G	31
Pimentel, David	27
Renk, Merry	20
Ross, Hal	32
Sandretto, Thomas	20
Scherr, Mary Ann	36
Schick, Marjorie	20
Schwarcz, June	20
Seavey, James	20
Seppa, Heikki	22
Shirk, Helen	27
Skoogfors, Olaf	18
Small, Carol	20
Smith, Jo-An	37
Snyder, Toni	29
Soellner, Walter & Soellner, Mitsuko	42
Spavings, Mary Ann	28
Spivak, Laurie	26
Steakley, Douglas	28
Stephen, Francis	20
Tawa, Roger	25
Trunkfield, Mona	28
Vallane, Olli	28
Watson, Lynda	37
Woell, Fred	80
Zilker, Sandra	33

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Price Until November 1, 1979

Pro-members	$ 85.00
Associate & Student	$ 95.00
Non-members & Inst.	$105.00

After November 1, 1979

Pro-members	$120.00
Associate & Student	$130.00
Non-members & Inst.	$140.00

Also Available:

SURVEY SET – Composed of 3 examples of each pro-member's work plus a slide of the person, when available. Housed in 3-140 slide carousels.

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Associate & Student	$8.00

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NOMINATING COMMITTEE

The Nominating Committee is requesting nominations and suggestions for positions which will become vacant in 1980. Elections will be held for president and vice-president – 2-year terms; and for one board member – 4-year term.

If you wish to be nominated or to nominate another pro-mem - ber, please contact either: Eleanor Moty, Art Dept., 6241 Humanities Bldg., University of Wisconsin, Madison, WI 53706; Jamie Bennett, Program in Artisanry, Boston University, 620 Commonwealth Avenue, Boston, MA 02215; or Robert Ebendorf, R. R. 1, Box 187, Highland, NY 12528.

Deadline for nomination is January 15, 1980.

PRO-MEMBER APOLOGIES

Havoc was played with our pro-member listing in the August 1979 Journal. Please accept our apologies for the following corrections:

Chunghi Choo, Iowa City, IA
Lynda LaRoche, Bloomington, IN
Jan Brooks Loyd, Charlotte, NC

NEW MEMBERS

We would like to welcome the following new members to SNAG:

ASSOCIATE MEMBERS

Bonnie Asher-Doar, Philadelphia, PA
Bette Bauer, San Francisco, CA
Louise Bermont, New York, NY
Celia Braswell, Tuscaloosa, AL
Nancy Briggs, Bellport, NY
Stephen Brown, Freeport, ME
Madeleine Chisholm, W. Vancouver, B. C. CANADA
Janice Coco, Richmond, VA
Contenti Supply Co., Inc.
Ken Cory, Ellensburg, WA
Florence Curnutt, San Jose, CA

Daniel Daniloff, Tucson, AZ
Richard Devine, Rochester, NY
Stephen Duffus, Delta, B. C. CANADA
Barbara Edwards, Berkeley, CA
Carolyn Ensley, Austin, TX
Alan Fairley, New York, NY
Alice Fass, New York, NY
Sheila Feldman, New York, NY
Betty Fogel, Downsview, Ontario, CANADA
Barbara Fornwalt, Farmington, CT
Douglas Frey, Saskatoon, Sask, CANADA

Alfred Ginsberg, S. Nyack, NY
Wesley Glebe, State College, PA
Robert Griffith, Montrose, PA
Jan Hall, Camp Meeker, CA
Jerome Hamilton, Chula Vista, CA
Janet Harriman, Durham, NC
Ronald Hyams, Bethesda, MD
Kathy Johnson, Houston, TX

Dennis Kankowske, Tinley Park, IL
Thea Katzenstein, Coral Gables, FL
Jean Kesler, Shawnee Mission, KS
Dr. Henry Kesselman, Bridgehampton, NY
Anthony Kim, Bound Brook, NJ
Sandy Lee, HONG KONG
Felicia Liban, Little Neck, NY
Micki Lippe, Charlottesville, VA
Lynne McClish, Burbank, CA
JoAnn Maggiora, Oakland, CA
Dennis Maron, Long Beach, CA
Bruno Martinazzi, Torino, ITALY
Kristin Moore, New York, NY
Virginia Mustin, Baltimore, MD

Jean Nevins, Miami Beach, FL
S. Nill & J. Wood, Buffalo, NY
Katherine O'Sullivan, Mosman Park, WESTERN AUSTRALIA
JoAnn Parsons, Seattle WA
Robert Pfannebecker, Lancaster, PA
Mary Raker, Austin, TX
John Rink, Hillsboro, OR

Jonathan Sivitz, Lakeville, MA
Richard Souligny, Dhahran, SAUDI ARABIA
Diana Taylor, White Plains, NY
Karen Tweet, Rochester, NY
Joanne Van Cleave, Long Beach, CA
Victoria's Jewelry, Nags Head, NC

Marcia Wallgren, Yellow Springs, OH
Mark Wilner, San Francisco, CA
Lee Woods, Liberty, MO
Craig Wright, Ganges, B. C., CANADA
Douglas Zaruba, St. Michaels, MD
Fred Zweig, Anchorage, AK

INSTITUTIONAL MEMBERS

Adelaide College of Arts, Underdale, S. AUSTRALIA
Crafts Center, Ripley WV
Emma Willard School Library, Troy, NY
Parsons School of Design, New York, NY
University of Kansas, Lawrence, KS
University of Texas, El Paso, TX

STUDENT MEMBERS

Peter Alan, Brookline, MA
Robyn Baumgartner, Fort Collins, CO
Claire Bersani, New York, NY
Curtis Cassano, Burlington, VT
Marjorie Chafec, Port Clinton, OH
Diane Falkenhagen, Galveston, TX
Mark Frankel, London, ENGLAND
Judith Genone, Fort Collins, CO
Rita Gravino, Rochester, NY
Rana Harmon, Washington, DC
Peter Hedren, Olivia, MN
Debi Hertzberg, W. Nyack, NY
Michael Hogan, Corvallis, OR
Marsha Hoffman, Cleveland, OH
Gordon Lawrie, Sussex, ENGLAND
Robyn Maloney, Numurkah, Vic, AUSTRALIA
Marie Monteros, Denton, TX
Greg Patrenos, Phoenix, AZ
Karen Pekelney, Haworth, NJ
Alexis Phillips, Greencastle, IN
Katie Quinlan, Arcata, CA
Rosalind Rivers, Toledo, OH
James Siegel, New York, NY
Jack Silva, Bloomington, IN
Mary Upin, San Diego, CA
Janet Wright, Pocatello, ID

PROJECTED BUDGET FOR FISCAL YEAR 1980

Disbursements:	
Goldsmiths Journal/Technical papers	$25,000.00
Audio-Visual services	600.00
Administrative expenses:	
Secretary, taxes and expenses	15,000.00
Postage	1,200.00
Office supplies & expenses	1,000.00
Telephone	1,000.00
Travel	500.00
Catalogues, subscriptions	150.00
Equipment	400.00
Conference preparation	600.00
Printing	500.00
Board expenses	1,200.00
Computer services	3,000.00
Professional fees	1,300.00
Total:	$51,450.00
Income:	
Dues	$42,000.00
Advertising	8,000.00
Postage	750.00
Extra Journals	700.00
Total:	$51,450.00

MEMBERS NEWS

STUART GOLDER won best of show at the 12th annual exhibit of the Craft Guild of Greater Cincinnati as well as top honors in the Summerfair juried exhibit. He also exhibited at the Contemporary Arts Center, Cincinnati, in "Strategies" an invitational and in the Beaux Arts juried exhibit in Columbus.

YVETTE KAPLAN participated in a show at the Prudential Center in Boston and will be featured in an exhibition at the Concord Art Association, Massachusetts, Sept./Oct.

BRUCE METCALF had a show in September at The Helen Drutt Gallery.

WILLIAM MICKLE participated in Crafts Now 1979; New Artists show at the Aaron Faber Gallery; and exhibited at the Contemporary Artisans Gallery in San Francisco.

PAHAKA will be in a limited edition show at Los Angeles Craft and Fold Art Museum, Oct./Nov.

NATALIE PAUL recently lectured to the Fashion Design Department at the Chicago Art Institute.

RANDEE PEYSER exhibited in "Gems of the Sea" at Aaron Faber, NYC.

ALAN REVERE recently won an award for booth design at the Pacific States Crafts Fair and honorable mention at the California State Fair, Sacramento. He also taught precious metallurgy at the California College of Arts and Crafts this summer.

JACK ROUTE had a show at the Memorial Union Gallery, Madison, WI.

ANNE TAUSSIG is exhibiting her work in the newly established Queen's Gallery in Charlotte, NC.

A. KENT VANDERPLAS has received an individual artist fellowship for $3,000 from the Ohio Arts Council. The money will be used for materials in creating new objects in pewter and gold.

HELEN WORRALL received the 1979 Award for Outstanding Achievement presented by Ohio Designer-Craftsmen.

BACK ISSUES —

Due to increased costs, the cover price of Goldsmiths Journal has been raised to $5 per issue, effective September 1, 1979 (by action of SNAG board). Likewise, back issue costs must also go up.

Below are brief excerpts from the table of contents in issues 1 - 10 (Golddust newsletter) and issues 11 - 20 (Goldsmiths Journal). If you need to round out your collection, NOW is the time.

Issue 1 (newsletter), $1.50; contains: 5 pages, no photos; review on "Land of the Scythians;" information on publications; introductory letter to newsletter by Ebendorf; and more.

Issue 2 (newsletter), $1.50; contains: 9 pages, no photos; reports on "Fifth Invitational Metals Exhibition" and "Reprise;" information on insurance coverage and investment; technical information on examining faceting material; and more.

Issue 3 (newsletter), $1.50; contains: 9 pages, no photos; information on books, films, magazines, etc.; technical information; information on artists' rights; and more.

Issue 4 (Golddust), $1.50; contains: 9 pages, no photos; thoughts on jewelry and the aesthetics of jewelry; report on "Silver & Goldsmithing in America" exhibit; technical information on amber; helpful hints; and more.

Issue 5 (Golddust), $1.50; contains: 23 pages, 3 photos; biographies of M. Matsukata, R. Ebendorf, and K. Matzdorf; reviews of "Precious Metals" and "How to Make Art and Survive;" articles by Seppa; technical articles on glass beads, forging and casting questionnaire; and more.

Issue 6 (Golddust), $1.50; contains: 19 pages, 1 photo; review of "Art Nouveau Belgium/France;" technical article on melting metal; information on glass beads and health hazards; and more.

Issue 7 (Golddust), $1.50; contains: 19 pages, 2 photos; biography of M. Lewis; review of "Metal in Mexico;" article on early metal use; technical article on selective plating; technical and aesthetic information; and more.

Issue 8 (Golddust), $1.50; contains: 23 pages, 6 photos; autobiographies of C. Evans and T. Markusen; review of "Diamonds Tomorrow;" articles on "Great Gold Bust," early iron use, "Jewelry: Back to Design;" technical article on gold and silver recovery; and more.

Issue 9 (Golddust), $2; contains: 27 pages, 16 photos; autobiographies of J. Meyer and W. Harper; reports on '76 Tyler-Electroforming Workshop and '76 Haystack-Frohlich Seminar; opinion by Metcalf and others; technical article on acrylics; and more.

Issue 10 (Golddust), $2; contains: 31 pages, 12 photos; autobiographies of S. Lechtzin and Armstrong; reviews of Tutankhamun and "Six Contemporary American Jewelers;" articles on jewelry bench design; viewpoint by Smith; technical articles on thermoforming acrylic and tumble finishing; and more.

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Issue 11 (Journal), $5, contains: 24 pages, 60 photos; autobiographies of R. Helzer, H. O'-Connor, M. Scherr; review of "Copper, Brass & Bronze Competition;" technical articles on safety procedures, synthetic gems, lamination, working acrylic; and more.

Issue 12 (Journal), $5; contains: 28 pages, 47 photos; autobiographies of S. Zilker and H. Gabriel; review of Salvador Dali; technical article on working acrylic, contemporary blacksmithing, and Tutankhamun's legacy; and more.

Issue 13 (Journal), $5; contains: 48 pages, 62 photos; autobiographies of R. Mawdsley and J. Satterfield; reviews of Seattle SNAG conference and exhibit "Loot," "Chicago Metalsmiths;" technical articles on mokume and oxidation hardening silver; feature articles on "Color Slides-Craftsman's Union Card;" and more.

Issue 14 (Journal), $5; contains: 36 pages, 51 photos; autobiographies of H. Seppa and J. Bennett; reviews of "Rocky Mountain Metal Symposium" and "Metal Conference;" technical article on shell forming; feature articles on Jewish ceremonial art and collecting debts; and more.

Issue 15 (Journal), $5; contains: 44 pages, 65 photos; autobiographies of L. Leupp, S. Devlin and M. Paisin; reviews on "Treasures of Irish Art" and "Silver for the Gods;" technical articles on die-forming, adhesive bonding; feature articles on H. Christensen, "Diamonds are Forever," European jewelry schools; and more.

Issue 16 (Journal), $5; contains: 52 pages, 87 photos, autobiographies of R. Mitchell, E. Niemi, D. Johnson, and J. Willmin; reviews on "Triumph of Humanism," "Goldsmiths Invitational," and "Mid American Crafts;" technical articles on "Analysis of Lamination," reticulated silver and hot forging copper; feature articles on Scandinavian holloware; and more.

Issue 17 (Journal), $5; contains: 56 pages, 72 photos; autobiographies of K. Bates, F. Becker, L. Betteridge, P. Donovan, P. Morton and L. Spivak; reviews of "Diamonds Today," Harper Enamels, and Baltimore's Winter Market; technical articles on electroforming research; feature articles on "Canadian Scene," "German Conversations;" and more.

Issue 18 (Journal), $5; contains: 48 pages, 73 photos; autobiographies on M. Abramson. V. Beetler, P. Blodgett, D. Gold and J. Murphy; reviews on "Michigan Silversmiths," "Landscapes," and "Indiana Crafts;" technical articles on casting synthetic stones, photographing metalwork and silver tarnishing; feature article on technology at Goldsmiths Hall; and more.

Issue 19 (Journal), $5; contains: 44 pages, 54 photos; autobiographies on R. Morris. W. Soellner and M. Jambe-Soellner; reviews of "Enamels '78," Ron Pearson, Contemporary English Jewelers, "American Goldsmiths Now," SNAG St. Louis; technical articles on aluminum TIG welding; feature article on Japanese excursion; and more.

Issue 20 (Journal), $5; contains: 52 pages, 54 photos; biographies of 12 Swedish metalsmiths; reviews of "Loot," "Rattlesnakes" and "California Invitational;" technical articles on silver polish; spray-etching, mokumegane, health hazards and wax injectors; feature articles on "Gold City" and China Crafts.

TO ORDER ANY OF THESE BACK ISSUES: simply check off which issues you desire, write a check (payable to SNAG) for the appropriate amount, and mail both to Goldsmiths Journal, 1600 Otterdale Road, Midlothian, VA 23113. Postage is included in cost except that non-North American members must include $1 extra per issue.

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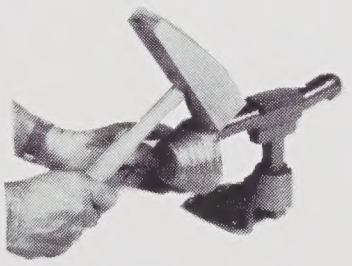

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